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=> fil reg
FILE 'REGISTRY' ENTERED AT 16:56:20 ON 07 SEP 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:     6 SEP 2004  HIGHEST RN 740796-45-6
DICTIONARY FILE UPDATES:    6 SEP 2004  HIGHEST RN 740796-45-6

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> d sta que l19
L14                 STR
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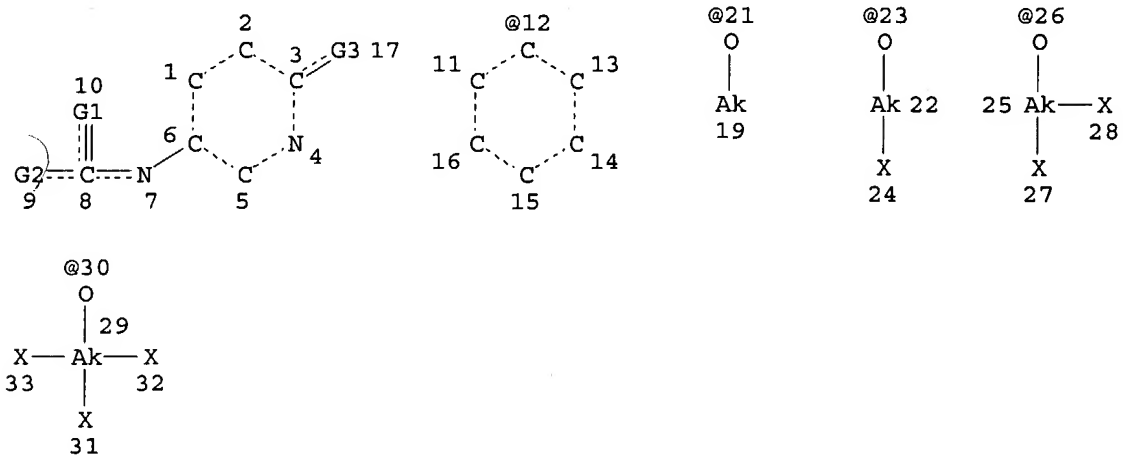


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VAR G2=HY/12
VAR G3=X/AK/21/23/26/30
NODE ATTRIBUTES:
CONNECT IS E1  RC AT  19
CONNECT IS E2  RC AT  22
CONNECT IS E3  RC AT  25
CONNECT IS E4  RC AT  29
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC   1  11
NUMBER OF NODES IS  31

STEREO ATTRIBUTES: NONE
L16         1406 SEA FILE=REGISTRY SSS FUL L14
L17                 STR
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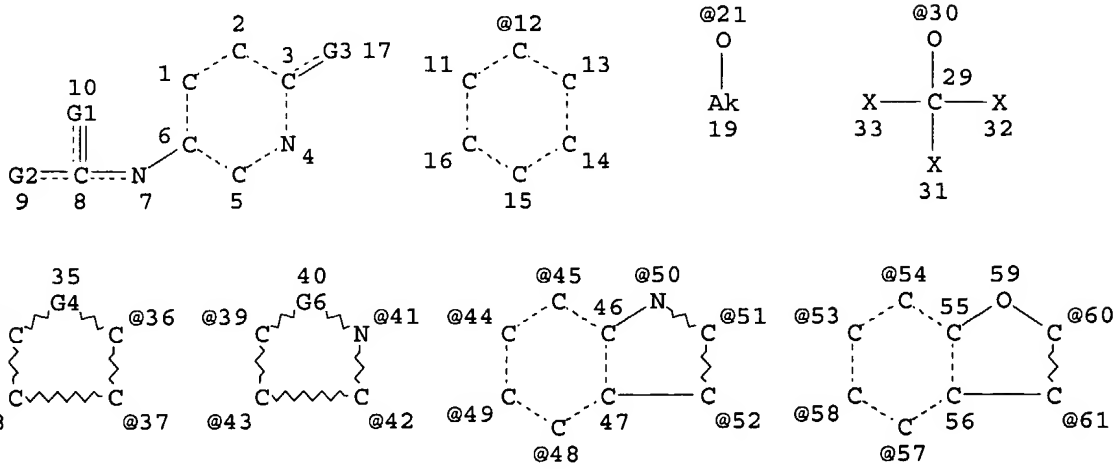

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VAR G2=36/37/41/42/43/39/51/52/48/49/44/45/50/60/61/57/58/53/54/12
VAR G3=X/AK/21/30
VAR G4=O/S
VAR G6=N/S
NODE ATTRIBUTES:
CONNECT IS E2 RC AT 7
CONNECT IS E1 RC AT 19
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC 1 11 34 39 44 53
NUMBER OF NODES IS 52

STEREO ATTRIBUTES: NONE
L19 532 SEA FILE=REGISTRY SUB=L16 SSS FUL L17

100.0% PROCESSED 1398 ITERATIONS 532 ANSWERS
SEARCH TIME: 00.00.01

=> d his

(FILE 'HOME' ENTERED AT 16:10:48 ON 07 SEP 2004)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 16:11:32 ON 07 SEP 2004
E WICKENDEN A/AU
L1 30 S E3,E4,E8-E10
E GROSS M/AU
L2 376 S E3
E GROSS MICHAEL/AU
L3 182 S E3,E9-E11
L4 2 S E32
E MCNAUGHTON/AU
L5 1 S E44
L6 2 S E129
L7 20 S E132-E135
E MC NAUGHTON/AU
E ICAGEN/AP,CS
L8 53 S E4-E11

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L9            3 S (US20040157829 OR US6737422 OR US6372767)/PN OR US99-147221#/
L10           3 S L1-L8 AND L9
                SEL RN

     FILE 'REGISTRY' ENTERED AT 16:15:06 ON 07 SEP 2004
L11          88 S E1-E88
L12          82 S L11 AND NC5/ES
L13          82 S L12 AND 46.156.30/RID
L14             STR
L15          38 S L14
L16        1406 S L14 FUL
                SAV L16 ZINNA770/A
L17             STR L14
L18          21 S L17 SAM SUB=L16
L19         532 S L17 FUL SUB=L16
                SAV L19 ZINNA770A/A
L20           1 S POTASSIUM/CN
L21          85 S K/MF

     FILE 'HCAPLUS' ENTERED AT 16:28:17 ON 07 SEP 2004
L22         167 S L19
L23           2 S L22 AND L1-L10
                SEL RN

     FILE 'REGISTRY' ENTERED AT 16:28:49 ON 07 SEP 2004
L24          83 S E89-E171
L25          70 S L24 AND L19
L26          13 S L24 NOT L25
L27           3 S L26 AND NR>=2
L28          73 S L25,L27
                SAV L28 ZINNA770B/A

     FILE 'HCAPLUS' ENTERED AT 16:30:01 ON 07 SEP 2004
                E ION CHANNEL/CT
L29        5115 S E16,E17
L30        1650 S E34
                E E31+ALL
L31        1917 S E1
                E E4+ALL
L32         106 S E4,E5
L33       23562 S E3
L34           2 S L22 AND L29-L33
L35           0 S L22 AND L20,L21
L36           4 S L22 AND ION?(L)CHANNEL?
L37           2 S L36 NOT L23
                SEL DN AN 2
L38           1 S E1-E3 AND L37
L39           3 S L34,L38
L40           2 S (K OR POTASSIUM)(L)CHANNEL? AND L22
L41           3 S VOLTAGE DEPENDENT AND L22
L42           3 S L39-L41
L43          90 S L19 (L) THU/RL
L44          47 S L19 (L) (PAC OR PKT OR DMA)/RL
L45         107 S L22 AND (PHARMACEUT? OR PHARMACOL?)/SC,SX
L46          64 S L43-L45 AND (PD<=20000804 OR PRD<=20000804 OR AD<=20000804)
L47           4 S NERVOUS SYSTEM(L)(CENTRAL OR PERIPHERAL) AND L46
                E NERVOUS SYSTEM/CT
L48           0 S L46 AND E30-E57
L49           0 S L46 AND E182-E184
L50           8 S L46 AND E3+OLD,NT,PFT,RT
                E NERVOUS SYSTEM, DISEASE/CT
L51          12 S L46 AND E3+OLD,NT,PFT,RT
L52          13 S L42,L47,L50,L51
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L53          11 S L52 NOT L1-L10
L54          51 S L46 NOT L52
L55          47 S L54 AND P/DT
                E NERVOUS SYSTEM AGENTS/CT
                E E3+ALL
L56          27 S L22 AND E4,E3+NT
L57          13 S L22 AND E188+OLD,NT,PFT,RT
L58          21 S L22 AND E189+OLD,NT,PFT,RT
L59          30 S L22 AND E190+OLD,NT,PFT,RT
L60          23 S L56-L59 AND (PD<=20000804 OR PRD<=20000804 OR AD<=20000804)
L61          11 S L60 NOT L52
L62          24 S L52,L61
L63          24 S L62 AND L1-L10,L22,L23,L29-L62
L64          22 S L63 NOT L1-L10
L65           2 S L63 NOT L64
                SEL HIT RN L64

     FILE 'REGISTRY' ENTERED AT 16:45:55 ON 07 SEP 2004
L66          65 S E1-E65
L67          16 S L66 AND (C12H7CL2N3O3 OR C14H13N3O3 OR C14H11N3O2 OR C13H9BRC

     FILE 'HCAOLD' ENTERED AT 16:54:33 ON 07 SEP 2004
L68           0 S L67

     FILE 'HCAPLUS' ENTERED AT 16:54:37 ON 07 SEP 2004
L69          10 S L67
L70           9 S L69 AND (PD<=20000804 OR PRD<=20000804 OR AD<=20000804)
L71           1 S L69 NOT L70
L72          10 S L69-L71

     FILE 'REGISTRY' ENTERED AT 16:56:20 ON 07 SEP 2004

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 16:56:32 ON 07 SEP 2004
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FILE COVERS 1907 - 7 Sep 2004  VOL 141 ISS 11
FILE LAST UPDATED: 6 Sep 2004  (20040906/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


=> d l72 all hitstr tot

L72  ANSWER 1 OF 10  HCAPLUS  COPYRIGHT 2004 ACS on STN
AN   2003:335065  HCAPLUS
DN   138:368620
ED   Entered STN:  02 May 2003
TI   Preparation of 2-chloro-5-nitrobenzamides as lipid modulators for
```

treatment of osteoporosis and diabetes
IN Amemiya, Yoshiya; Wakabayashi, Kenji; Takaishi, Sachiko; Kitayama, Ken
PA Sankyo Company, Limited, Japan
SO PCT Int. Appl., 221 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
IC ICM C07C233-65
ICS C07C233-66; C07C233-67; C07C233-75; C07C233-76; C07C233-80; C07C233-81; C07C311-21; C07C311-46; C07C311-58; C07C311-64; C07C317-42; C07C323-42; C07C323-43; C07C335-20; C07C335-26; C07C335-28; C07D213-40; C07D213-75; C07D215-40
CC 25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003035602	A1	20030501	WO 2002-JP11068	20021024
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2003201271	A2	20030718	JP 2002-310549	20021025
PRAI JP 2001-327189	A	20011025		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2003035602	ICM	C07C233-65
	ICS	C07C233-66; C07C233-67; C07C233-75; C07C233-76; C07C233-80; C07C233-81; C07C311-21; C07C311-46; C07C311-58; C07C311-64; C07C317-42; C07C323-42; C07C323-43; C07C335-20; C07C335-26; C07C335-28; C07D213-40; C07D213-75; C07D215-40

OS MARPAT 138:368620
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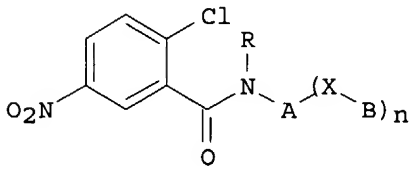

I

AB The title compds. I [wherein A = (un)substituted Ph, naphthyl, acenaphthenyl, Py, (iso)quinolyl, pyrimidyl, (benzo)furyl, pyranyl, chromanyl, (benzo)thienyl, pyrrolyl, (iso)indolyl, imidazolyl, pyrazolyl, pyridazinyl, pyrazinyl, (iso)oxazolyl, pyrrolidinyl, piperidyl, piperazyl, benzoxazolyl, benzoisooxazolyl, (iso)thiazolyl, benzothiazolyl, or biphenyl; B = (un)substituted aryl, cycloalkyl, or heterocyclyl; R = H or alkyl; X = a bond, O, S, CH2, CO, NH, SO2NH, NHSO2, CONH, NHCO, or OCH2; n = 0-1] and pharmaceutically acceptable salts thereof are prepared as lipid modulators for treatment of osteoporosis and diabetes. For example, 4-phenylaniline hydrochloride was reacted with 2-chloro-5-nitrobenzoyl

chloride in pyridine to afford N-(4-phenylphenyl)-2-chloro-5-nitrobenzamide. The above N-(4-phenylphenyl)-2-chloro-5-nitrobenzamide showed IC50 of 1.9 nM against human PPAR γ. I are useful for the treatment of osteoporosis, and diabetes, etc.

ST benzamide lipid modulator treatment osteoporosis diabetes prepn human PPAR

IT Lipids, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(hyperlipidemia; preparation of chloro(nitro)benzamides as lipid modulators for treatment of osteoporosis and diabetes)

IT Lipids, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(metabolism, disorder; preparation of chloro(nitro)benzamides as lipid modulators for treatment of osteoporosis and diabetes)

IT Antiarteriosclerotics
Antidiabetic agents
Arteriosclerosis
Diabetes mellitus
Human
Hypolipemic agents
Osteoporosis
(preparation of chloro(nitro)benzamides as lipid modulators for treatment of osteoporosis and diabetes)

IT Peroxisome proliferator-activated receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(γ; preparation of chloro(nitro)benzamides as lipid modulators for treatment of osteoporosis and diabetes)

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RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(drug candidate; preparation of chloro(nitro)benzamides as lipid modulators for treatment of osteoporosis and diabetes)

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RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of chloro(nitro)benzamides as lipid modulators for treatment of osteoporosis and diabetes)

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RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of chloro(nitro)benzamides as lipid modulators for treatment of osteoporosis and diabetes)

IT 6332-77-0P 30235-27-9P 51344-13-9P 62345-76-0P 91703-23-0P
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280107-44-0P 325979-29-1P 359714-00-4P 372096-43-0P 372096-44-1P
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518982-03-1P 518982-04-2P 518982-05-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of chloro(nitro)benzamides as lipid modulators for treatment of osteoporosis and diabetes)

IT 56-05-3 57-67-0, Sulfaguanidine 61-80-3 66-25-1, n-Hexanal 68-35-9
72-14-0 75-07-0, Acetaldehyde, reactions 75-36-5, Acetyl chloride
75-65-0, tert-Butanol, reactions 79-22-1 80-32-0 92-36-4 92-54-6
92-87-5, [1,1'-Biphenyl]-4,4'-diamine 93-05-0 94-09-7 94-70-2
95-24-9 98-09-9, Benzenesulfonyl chloride 98-59-9, 4-Toluenesulfonyl

chloride 98-88-4, Benzoyl chloride 99-03-6 99-09-2 99-92-3
99-98-9 100-01-6, reactions 100-02-7, reactions 101-79-1 103-69-5
103-71-9, Phenylisocyanate, reactions 103-72-0, Phenylisothiocyanate
106-49-0, reactions 107-15-3, 1,2-Ethanediamine, reactions 108-24-7,
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RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of chloro(nitro)benzamides as lipid modulators for treatment of osteoporosis and diabetes)

IT 521105-19-1 521105-20-4 521105-21-5, 3: PN: WO03035602 SEQID: 3 unclaimed DNA 521105-22-6, 4: PN: WO03035602 SEQID: 4 unclaimed DNA
RL: PRP (Properties)
(unclaimed nucleotide sequence; preparation of 2-chloro-5-nitrobenzamides as lipid modulators for treatment of osteoporosis and diabetes)

RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD

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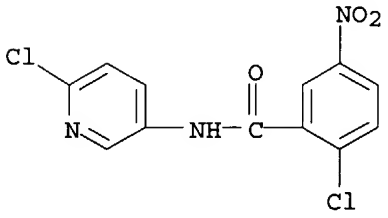
IT **372094-23-0P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of chloro(nitro)benzamides as lipid modulators for treatment of osteoporosis and diabetes)

RN 372094-23-0 HCAPLUS

CN Benzamide, 2-chloro-N-(6-chloro-3-pyridinyl)-5-nitro- (9CI) (CA INDEX NAME)



L72 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:816614 HCAPLUS
DN 135:357944
ED Entered STN: 09 Nov 2001
TI Preparation of nitrophenylcarboxamide derivatives as peroxisome proliferator-activated receptor (PPAR) γ modulators
IN Amemiya, Yoshiya; Wakabayashi, Kenji; Takaishi, Sachiko; Fukuda, Chie
PA Sankyo Company, Ltd., Japan
SO PCT Int. Appl., 186 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
IC ICM C07C233-65
ICS C07C233-66; C07C233-75; C07C233-80; C07C233-81; C07C271-28; C07C311-08; C07C311-21; C07C311-58; C07C311-64; C07D207-325; C07D213-40; C07D213-75; C07D213-76; C07D213-81; C07D213-82;

C07D215-38; C07D215-40; C07D217-22; C07D231-40
CC 28-17 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1, 25
FAN.CNT 1

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PI	WO 2001083427	A1	20011108	WO 2001-JP3655	20010426 <--
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	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
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	EP 1277729	A1	20030122	EP 2001-925984	20010426 <--
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PRAI	JP 2000-129565	A	20000428 <--		
	JP 2001-60366	A	20010305		
	WO 2001-JP3655	W	20010426		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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	ICS	C07C233-66; C07C233-75; C07C233-80; C07C233-81; C07C271-28; C07C311-08; C07C311-21; C07C311-58; C07C311-64; C07D207-325; C07D213-40; C07D213-75; C07D213-76; C07D213-81; C07D213-82; C07D215-38; C07D215-40; C07D217-22; C07D231-40
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OS MARPAT 135:357944
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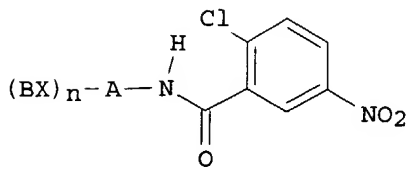

I

AB The title compds. I [A represents Ph, etc.; B represents aryl, etc.; X represents oxygen, etc.; and n is 0 or 1] are prepared I are remedies for

involutional osteoporosis which inhibit the accelerated differentiation of adipocytes and promote the formation and differentiation of osteoblasts from stem cells; I are also remedies for diabetes. In an in vitro test for PPAR γ modulating activity, N-[4-(4-methylpiperazin-1-ylcarbonyl)phenyl]-(2-chloro-5-nitrophenyl)carboxamide showed IC50 value of 0.6 nM.

ST PPAR gamma modulator nitrophenylcarboxamide prepn; piperazinylcarbonylphenylchloronitrophenylcarboxamide prepn PPAR gamma modulator; osteoporosis remedy nitrophenylcarboxamide prepn; diabetes remedy nitrophenylcarboxamide prepn

IT Nerve, disease
(diabetic neuropathy; preparation and effect of nitrophenylcarboxamide derivs. with PPAR γ modulating activity)

IT Cardiovascular system
(disease; preparation and effect of nitrophenylcarboxamide derivs. with PPAR γ modulating activity)

IT Metabolism, animal
(disorder, lipid; preparation and effect of nitrophenylcarboxamide derivs. with PPAR γ modulating activity)

IT Bone, disease
(fracture; preparation and effect of nitrophenylcarboxamide derivs. with PPAR γ modulating activity)

IT Anti-inflammatory agents
Antidiabetic agents
Antitumor agents
(nitrophenylcarboxamide derivs. with PPAR γ modulating activity)

IT Pancreas, disease
(pancreatitis; preparation and effect of nitrophenylcarboxamide derivs. with PPAR γ modulating activity)

IT Anemia (disease)
Antiobesity agents
Arteriosclerosis
Autoimmune disease
Bone, disease
Bone formation
Diabetes mellitus
Glaucoma (disease)
Graves' disease
Hypertension
Kidney, disease
Leukemia
Liver, disease
Osteoporosis
Rickets
(preparation and effect of nitrophenylcarboxamide derivs. with PPAR γ modulating activity)

IT Peroxisome proliferator-activated receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(preparation of nitrophenylcarboxamide derivs. as PPAR γ modulators)

IT Retinoids
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(related diseases; preparation and effect of nitrophenylcarboxamide derivs. with PPAR γ modulating activity)

IT Acidosis
(uric acid; preparation and effect of nitrophenylcarboxamide derivs. with PPAR γ modulating activity)

IT 69-93-2, Uric acid, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(disease; preparation and effect of nitrophenylcarboxamide derivs. as PPAR γ modulators)

IT 359714-00-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation and effect of nitrophenylcarboxamide derivs. as PPAR γ modulators)

IT 312717-15-0P 313516-66-4P 372093-25-9P 372093-65-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of nitrophenylcarboxamide derivs. as PPAR γ modulators)

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372096-01-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of nitrophenylcarboxamide derivs. as PPAR γ modulators)

IT 372096-02-1P 372096-03-2P 372096-04-3P 372096-05-4P 372096-06-5P

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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of nitrophenylcarboxamide derivs. as PPAR γ modulators)

IT 56-05-3, 2-Amino-4,6-dichloropyrimidine 57-67-0, Sulfaguanidine 61-80-3, 2-Amino-5-chlorobenzoxazole 62-56-6, Thiourea, reactions 66-25-1, Hexanal 68-35-9, Sulfadiazine 72-14-0 74-88-4, Methyl iodide, reactions 75-07-0, Acetaldehyde, reactions 75-36-5, Acetyl chloride 80-32-0 92-36-4 92-87-5, 4-(4-Aminophenyl)aniline 93-05-0, 4-Diethylaminoaniline 94-09-7, Ethyl 4-aminobenzoate 94-70-2, 2-Ethoxyaniline 95-24-9, 2-Amino-6-chlorobenzothiazole 98-09-9, Benzenesulfonyl chloride 98-59-9, 4-Toluenesulfonyl chloride 98-88-4, Benzoyl chloride 99-03-6, 3-Acetylaniline 99-09-2, 3-Nitroaniline 99-92-3, 4-Acetylaniline 99-98-9, 4-Dimethylaminoaniline 100-01-6, 4-Nitroaniline, reactions 103-71-9, Phenylisocyanate, reactions 103-72-0, Phenylisothiocyanate 104-10-9, 4-(2-Hydroxyethyl)aniline 106-49-0, 4-Methylaniline, reactions 108-44-1, reactions 108-52-1, 2-Amino-4-methylpyrimidine 110-62-3, Valeraldehyde 123-30-8, 4-Aminophenol 123-38-6, Propionaldehyde, reactions 123-72-8, Butylaldehyde 124-13-0, Octanal 124-63-0, Methanesulfonyl chloride 127-69-5, Sulfaisoxazole 136-95-8, 2-Aminobenzothiazole 144-82-1, Sulfamethizole 339-43-5, 1-Butyl-3-sulfanilylurea 348-40-3, 2-Amino-6-fluorobenzothiazole 350-03-8, 3-Acetylpyridine 404-71-7, 3-Fluorophenylisocyanate 461-82-5, 4-Trifluoromethoxyaniline 462-08-8, 3-Aminopyridine 504-24-5, 4-Aminopyridine 515-64-0, Sulfisomidine 526-08-9, Sulfaphenazole 556-61-6, Methylthioisocyanate 578-54-1, 2-Ethylaniline 578-66-5, 8-Aminoquinoline 580-17-6, 3-Aminoquinoline 587-02-0, 3-Ethylaniline 589-16-2, 4-Ethylaniline 591-27-5, 3-Aminophenol 594-44-5, Ethanesulfonyl chloride 611-34-7, 5-Aminoquinoline 651-06-9, Sulfameter 696-59-3, 2,5-Dimethoxytetrahydrofuran 722-92-9 723-46-6, Sulfamethoxazole 729-99-7 767-64-6, 4-Amino-2,1,3-benzothiadiazole 873-74-5, 4-Cyanoaniline 874-60-2, 4-Methylbenzoyl chloride 950-58-3, 3,5-Di-tert-butyl-4-hydroxyaniline 1118-02-1, Trimethylsilylisocyanate 1141-40-8 1211-40-1 1532-84-9, 1-Aminoisoquinoline 1572-10-7, 3-Amino-5-phenylpyrazole 1603-41-4, 2-Amino-5-methylpyridine 1603-91-4, 2-Amino-4-methylthiazole 1622-57-7, 2-Amino-1-methylbenzimidazole 1747-60-0, 2-Amino-6-methoxybenzothiazole 1824-81-3, 2-Amino-6-methylpyridine 1885-29-6, 2-Cyanoaniline 2051-79-8 2104-09-8 2113-55-5, 3-Phenylaniline hydrochloride 2113-61-3, 4-Phenylaniline hydrochloride 2185-92-4, 2-Phenylaniline hydrochloride 2221-00-3 2237-30-1, 3-Cyanoaniline 2359-60-6, N-(4-Aminophenyl)piperidine 2516-96-3, 2-Chloro-5-nitrobenzoic acid 2524-67-6, N-(4-Aminophenyl)morpholine 2536-91-6, 2-Amino-6-methylbenzothiazole 2696-84-6, 4-Propylaniline 3173-56-6, Benzylisocyanate 3320-86-3, 2-Nitrophenylisocyanate 3575-32-4, 3-Dimethylaminoaniline dihydrochloride 3673-53-8 4005-51-0, 2-Amino-1,3,4-thiadiazole 4214-75-9, 2-Amino-3-nitropyridine 4344-55-2, 4-Butoxyaniline 4461-33-0, Benzoylisocyanate 4487-50-7, 2-Amino-4-nitropyridine 4506-71-2 4518-10-9, Methyl 3-aminobenzoate 4657-93-6, 5-Aminoacenaphthene 5049-61-6, 2-Aminopyrazine 5266-85-3, 2-Isopropyl-6-methylaniline 5330-67-6 5330-79-0 5350-93-6, 5-Amino-2-chloropyridine 5413-85-4, 5-Amino-4,6-dichloropyrimidine 5438-70-0, Ethyl 4-aminophenylacetate 5469-69-2, 3-Amino-6-chloropyridazine 5600-21-5 6283-25-6, 2-Chloro-5-nitroaniline

6285-57-0, 2-Amino-6-nitrobenzothiazole 6336-68-1 6380-08-1
6635-86-5 6945-68-2, 2-Amino-5-bromo-3-nitropyridine 6994-25-8,
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Methoxyphenylisocyanate 19617-43-7, Ethoxycarbonylisocyanate
19952-47-7, 2-Amino-4-chlorobenzothiazole 20260-53-1, Nicotinoyl
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2,5-Diaminopyridine dihydrochloride 28989-50-6 30235-26-8
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59025-55-7, 2,4-Difluorophenylisocyanate 61296-22-8 64415-14-1
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85112-35-2 88327-91-7 91619-38-4 92028-21-2 94838-59-2
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372096-55-4 372096-56-5, 3-(4-Tolylaminosulfonyl)aniline 372096-57-6
372096-58-7 372096-59-8 372096-60-1 372096-61-2 372096-62-3
372096-63-4 372096-64-5 372096-65-6 372096-66-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of nitrophenylcarboxamide derivs. as PPAR γ modulators)

IT 325979-29-1P 372096-43-0P, 4-(4-Acetoxyphenyl)aniline 372096-44-1P
372096-45-2P 372096-46-3P 372096-47-4P 372096-48-5P 372096-49-6P
372096-50-9P 372096-51-0P 372096-52-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of nitrophenylcarboxamide derivs. as PPAR γ modulators)

RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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(2) American Cyanamid Company; EP 636625 A2 1995 HCAPLUS
(3) Azoplate Corporation; US 2754209 A 1956 HCAPLUS
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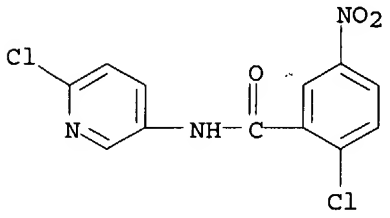
(32) Tularik Inc; US 6200995 B1 HCAPLUS
(33) Tularik Inc; WO 9938845 A1 1999 HCAPLUS
(34) Tularik Inc; WO 9938845 A1 1999 HCAPLUS

IT **372094-23-0P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of nitrophenylcarboxamide derivs. as PPAR γ modulators)

RN 372094-23-0 HCAPLUS
CN Benzamide, 2-chloro-N-(6-chloro-3-pyridinyl)-5-nitro- (9CI) (CA INDEX NAME)



L72 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:581875 HCAPLUS
DN 135:166825
ED Entered STN: 10 Aug 2001
TI Preparation of pyrazoles and indazoles for blockading voltage dependent sodium channels
IN Garthwaite, Gitti; Selwood, David; Kling, Marcel; Wishart, Grant
PA University College London, UK
SO PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07D405-04
ICS C07D231-14; C07D413-04; C07D409-04; C07D417-04; C07D417-14; C07D401-12; C07D231-56; A61K031-415; A61K031-416; A61K031-4155; A61P025-00; C07D403-04
CC 28-8 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001057024	A1	20010809	WO 2001-GB472	20010205 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1252156	A1	20021030	EP 2001-904082	20010205 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2003171403	A1	20030911	US 2003-203001	20030225 <--
PRAI GB 2000-2666	A	20000204 <--		

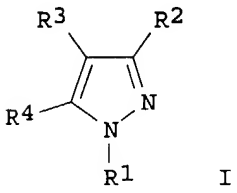
WO 2001-GB472 W 20010205

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2001057024	ICM	C07D405-04
	ICS	C07D231-14; C07D413-04; C07D409-04; C07D417-04; C07D417-14; C07D401-12; C07D231-56; A61K031-415; A61K031-416; A61K031-4155; A61P025-00; C07D403-04
US 2003171403	ECLA	A61K031/415; A61K031/415H5; A61K031/4155; A61K031/416; A61K031/422; A61K031/4439; C07D231/14; C07D405/04; C07D409/04; C07D413/12; C07D413/12; C07D417/14; C07D417/14 <--

OS MARPAT 135:166825

GI



I

AB The title compds. [I; R1 = H, alkyl, aryl, alkylaryl; R2 = aryl, heteroaryl, 3-6 membered heterocyclyl, etc.; R3, R4 = H, alkyl, alkenyl, etc.; R3 and R4, together with the carbon atoms to which they are attached, form Ph] which are capable of blockading voltage-dependent sodium channels and are useful in particular, in treating glaucoma and multiple sclerosis, were prepared E.g., a multi-step synthesis of I [R1 = CH2Ph; R2 = 5-methoxycarbonyl-2-furyl; R3 and R4, together with the carbon atoms to which they are attached, form Ph] which showed IC50 of 15.5 μM against guanidine flux through sodium channels, was given.

ST sodium channel blocker pyrazole indazole prepn; neuroprotectant pyrazole indazole prepn; glaucoma pyrazole indazole prepn; multiple sclerosis pyrazole indazole prepn

IT Cytoprotective agents
(neuroprotectants; preparation of pyrazoles and indazoles for blockading voltage dependent sodium channels)

IT Glaucoma (disease)
Multiple sclerosis
(preparation of pyrazoles and indazoles for blockading voltage dependent sodium channels)

IT Ion channel blockers
(sodium; preparation of pyrazoles and indazoles for blockading voltage dependent sodium channels)

IT 170632-13-0P 170632-42-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of pyrazoles and indazoles for blockading voltage dependent sodium channels)

IT 170632-14-1P 170632-31-2P 170632-32-3P 170632-41-4P 170632-43-6P
170632-44-7P 170632-45-8P 170632-47-0P 170632-48-1P 170632-49-2P
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353505-04-1P 353505-06-3P 353505-08-5P 353505-09-6P 353505-10-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pyrazoles and indazoles for blockading voltage dependent sodium channels)

IT 91-56-5, Isatin 108-00-9, N,N-Dimethylethylenediamine 552-16-9, 2-Nitrobenzoic acid 611-13-2 926-64-7, Dimethylaminoacetonitrile 2527-99-3 29601-98-7, N-Benzylhydroxylamine hydrochloride 313545-15-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of pyrazoles and indazoles for blockading voltage dependent sodium channels)

IT 4498-67-3P, Indazole-3-carboxylic acid 41354-03-4P, 1-Benzylindazole-3-carboxylic acid 43120-28-1P, Methyl indazole-3-carboxylate 66607-27-0P, 3-Iodo-1H-indazole 173600-03-8P 205643-28-3P, 1-Benzyl-3-iodo-1H-indazole 215789-60-9P, Methyl 2-trimethylstannyl-5-furanoate 353504-65-1P 353504-67-3P 353504-69-5P, 1H-Indazole-3-butanenitrile 353504-71-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of pyrazoles and indazoles for blockading voltage dependent sodium channels)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

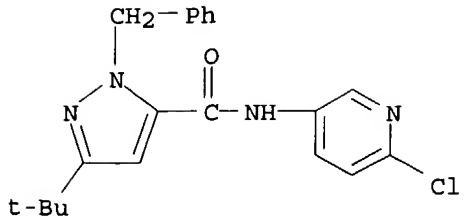
RE

(1) Barth, F; US 5462960 A 1995 HCAPLUS
(2) Bayer Ag; DE 19642255 A 1998 HCAPLUS
(3) Bayer Ag; DE 19642323 A 1998 HCAPLUS
(4) Boehringer Ingelheim Pharma; DE 19834714 A 2000 HCAPLUS
(5) Novapharme; EP 0459887 A 1991 HCAPLUS
(6) Yung Shin Pharm Ind Co Ltd; EP 0667345 A 1995 HCAPLUS

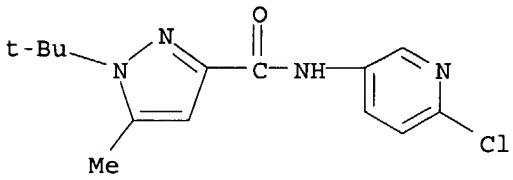
IT **353504-40-2P 353504-41-3P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pyrazoles and indazoles for blockading voltage dependent sodium channels)

RN 353504-40-2 HCAPLUS

CN 1H-Pyrazole-5-carboxamide, N-(6-chloro-3-pyridinyl)-3-(1,1-dimethylethyl)-1-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 353504-41-3 HCAPLUS
CN 1H-Pyrazole-3-carboxamide, N-(6-chloro-3-pyridinyl)-1-(1,1-dimethylethyl)-5-methyl- (9CI) (CA INDEX NAME)



L72 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:565011 HCAPLUS
DN 135:137520
ED Entered STN: 03 Aug 2001
TI Preparation of benzoylamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and the use thereof
IN Cai, Sui Xiong; Drewe, John A.
PA Cytovia, Inc., USA
SO PCT Int. Appl., 90 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07D213-82
ICS C07D239-28; C07D241-28; C07D213-75; C07D401-12; C07D307-68; A61K031-44; A61K031-4965; C07D207-34; A61K031-341
CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1, 63
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001055115	A1	20010802	WO 2001-US2478	20010126 <--
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	EP 1257536	A1	20021120	EP 2001-903311	20010126 <--
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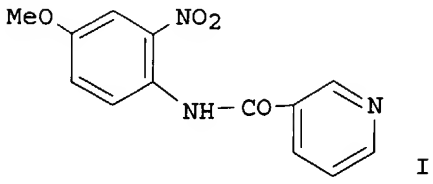
	JP 2003520854	T2	20030708	JP 2001-555057	20010126 <--
PRAI	US 2000-177648P	P	20000127	<--	
	WO 2001-US2478	W	20010126		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2001055115	ICM	C07D213-82
	ICS	C07D239-28; C07D241-28; C07D213-75; C07D401-12; C07D307-68; A61K031-44; A61K031-4965; C07D207-34; A61K031-341

OS MARPAT 135:137520

GI



I

AB Title compds. [Ar1CONR11Ar; Ar, Ar1 independently = aryl, heteroaryl with less than two nitrogen; R11 = H, alkyl, cycloalkyl, aryl, heteroaryl], or a pharmaceutically acceptable salt, or prodrug thereof are prepared and method of treating a disorder responsive to the induction of apoptosis in mammal in need of treatment. The present invention relates to the discovery that title compds. are activators of caspase and inducers of apoptosis. Title compds. of this invention may be used to induce cell death in a variety of clin. conditions in which uncontrolled growth and spread of abnormal cells occurs. Thus, the title compound I was prepared and biol. tested for caspase activity with cancer cell lines T47D and ZR75-1, for induced nuclear fragmentation and mitotic arrest in Jurkat cells, and for cell cycle arrest and apoptosis in solid tumor cell lines.

ST benzamide prepn caspase activator apoptosis inducer; nicotinamide prepn caspase activator apoptosis inducer; pyrimidinecarboxamide prepn caspase activator apoptosis inducer; pyrrolylcarboxamide prepn caspase activator apoptosis inducer; antitumor agent nicotinamide benzamide pyrimidinecarboxamide pyrrolylcarboxamide

IT Sarcoma
(Kaposi's; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Lymphoproliferative disorders
(Waldenstrom's macroglobulinemia, primary; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Kidney, neoplasm
(Wilms'; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Leukemia
(acute lymphocytic; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Anti-inflammatory agents
Antiarthritics
Antitumor agents
(benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides)

IT Adrenal cortex, neoplasm
Bladder

Esophagus
Head
Lung, neoplasm
Mammary gland
Neck, anatomical
Ovary, neoplasm
Pancreas, neoplasm
Prostate gland
Stomach, neoplasm
Thyroid gland, neoplasm
(carcinoma; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Hyperplasia
(cervical; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Uterus, neoplasm
(cervix, carcinoma; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Chorion
(choriocarcinoma; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Leukemia
(chronic lymphocytic; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Leukemia
(chronic myelocytic; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Intestine, neoplasm
(colon, carcinoma; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Uterus, neoplasm
(endometrium, carcinoma; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Mycosis
(fungoides; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Leukemia
(hairy-cell; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Intestine, disease
(inflammatory; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Pancreatic islet of Langerhans
(insulinoma, malignant pancreatic; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Skin, neoplasm
(mycosis fungoides; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Leukemia
(myelogenous, acute; preparation of benzamides, nicotinamides,

pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Nerve, neoplasm
(neuroblastoma; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Lymphoma
(non-Hodgkin's; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Bone, neoplasm
(osteosarcoma; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Autoimmune disease
Hodgkin's disease
Melanoma
Multiple myeloma
Polycythemia vera
Psoriasis
Rheumatoid arthritis
Skin, disease
Skin, neoplasm
(preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Drug delivery systems
(prodrugs; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Kidney, neoplasm
(renal cell carcinoma; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Myoma
(rhabdomyosarcoma; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Lung, neoplasm
(small-cell carcinoma; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Animal tissue
(soft, sarcoma; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Carcinoma
(testicular; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT Platelet (blood)
(thrombocytosis, essential; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT 7440-70-2, Calcium, biological studies
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(hypercalcemia malignant; preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT 352228-41-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT 68279-97-0P 224817-07-6P 224817-09-8P 313526-66-8P 320582-20-5P
325457-92-9P 329043-12-1P 329219-56-9P 342014-28-2P 352033-37-5P
352228-37-6P 352228-38-7P 352228-39-8P 352228-40-1P 352228-42-3P
352228-43-4P 352228-44-5P 352228-45-6P 352228-46-7P 352228-47-8P
352228-48-9P 352228-49-0P 352228-50-3P 352228-51-4P 352228-52-5P
352228-53-6P 352228-54-7P 352228-55-8P 352228-56-9P 352228-57-0P
352228-58-1P 352228-59-2P 352228-60-5P 352228-61-6P 352228-62-7P
352228-63-8P 352228-64-9P 352228-65-0P 352228-66-1P 352228-67-2P
352228-68-3P 352228-69-4P 352228-70-7P 352228-71-8P 352228-72-9P
352228-73-0P 352228-74-1P 352228-75-2P 352228-76-3P 352228-77-4P
352228-78-5P 352228-79-6P 352228-80-9P 352228-81-0P 352228-82-1P
352228-83-2P 352228-84-3P 352228-85-4P 352228-86-5P 352228-87-6P
352228-88-7P 352228-89-8P **352228-90-1P** 352228-91-2P
352228-92-3P 352228-93-4P 352228-94-5P 352228-95-6P
352228-96-7P **352228-97-8P** 352228-98-9P 352228-99-0P
352229-00-6P 352229-01-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT 186322-81-6, caspase
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT 88-74-4, 2-Nitroaniline 89-62-3, 4-Methyl-2-nitroaniline 89-63-4, 4-Chloro-2-nitroaniline 96-96-8, 4-Methoxy-2-nitroaniline 97-02-9, 2,4-Dinitroaniline 98-97-5, 2-Pyrazinecarboxylic acid 98-98-6, Picolinic acid 102-50-1, 4-Methoxy-2-methylaniline 104-94-9, p-Anisidine 122-01-0, 4-Chlorobenzoyl chloride 364-78-3, 4-Fluoro-2-nitroaniline 400-98-6, 2-Nitro-4-trifluoromethylaniline 445-03-4, 4-Chloro-2-(trifluoromethyl)aniline 488-93-7, 3-Furoic acid 610-81-1, 4-Amino-3-nitrophenol 616-86-4, 4-Ethoxy-2-nitroaniline 636-44-2, 2,5-Dimethyl-3-furoic acid 824-40-8, Picolinic acid N-oxide 876-08-4, 4-(Chloromethyl)benzoyl chloride 931-03-3, Pyrrole-3-carboxylic acid 1635-84-3, 2-Nitro-4,6-dimethylaniline 2369-19-9, 2-Fluoro-5-methylpyridine 2735-04-8, 2,4-Dimethoxyaniline 3222-47-7, 6-Methylnicotinic acid 4595-61-3, Pyrimidine-5-carboxylic acid 5049-61-6, Aminopyrazine 5202-85-7, 2-Amino-5-chlorobenzamide 5202-89-1, Methyl 2-amino-5-chlorobenzoate 5350-93-6, 5-Amino-2-chloropyridine 5413-85-4, 5-Amino-4,6-dichloropyrimidine 5470-70-2, Methyl 6-methylnicotinate 5473-00-7 5521-55-1, 2-Methyl-5-pyrazinecarboxylic acid 5922-60-1, 2-Amino-5-chlorobenzonitrile 5925-93-9, 2-Amino-5-methyl-benzonitrile 6280-88-2, 4-Chloro-2-nitrobenzoic acid 6310-19-6, 4-(tert-Butyl)-2-nitroaniline 6393-40-4, 4-Amino-3-nitrobenzonitrile 6628-77-9, 5-Amino-2-methoxypyridine 6943-69-7 6945-68-2, 2-Amino-5-bromo-3-nitropyridine 6947-94-0, 2-Methyl-3-furoic acid 6972-71-0, 4,5-Dimethyl-2-nitroaniline 7595-31-5, 4,5-Dimethoxy-2-nitroaniline 10400-19-8, Nicotinoyl chloride 14254-57-0, Isonicotinoyl chloride 20826-04-4, 5-Bromonicotinic acid 26697-35-8, 4-Benzyloxy-2-nitroaniline 26759-46-6, 2-Amino-4,5-dimethoxybenzoic acid methyl ester 26961-27-3, 2-Amino-4,5-dimethoxybenzonitrile 28657-75-2, 2-Amino-4,5-methylenedioxyacetophenone

31431-19-3, 4-Amino-3-nitrobenzophenone 38496-18-3, 2,6-Dichloronicotinic acid 40127-89-7 41667-95-2, 5,6-Dichloronicotinic acid 42521-08-4, 2,6-Dichloropyridine-4-carbonyl chloride 49609-84-9, 2-Chloronicotinoyl chloride 55715-03-2, 4-Bromomethyl-3-nitrobenzoic acid 58757-38-3, 6-Chloronicotinoyl chloride 62790-50-5 70165-31-0, 6-Cyanonicotinic acid 78056-39-0, 4,5-Difluoro-2-nitroaniline 82039-90-5, 4-Amino-5-nitroimidazole 154934-99-3, 2-Chloro-4-(trifluoromethyl)pyrimidine-5-carbonyl chloride 158063-66-2, 4-Trifluoromethylpyridine-3-carboxylic acid 175204-90-7 231291-22-8, 6-(Trifluoromethyl)nicotinic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

IT 403-45-2P, 6-Fluoronicotinic acid 49668-90-8P 148258-27-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Agrevo Uk Ltd; WO 9525723 A 1995 HCAPLUS
(2) Amgen Inc; WO 9924404 A 1999 HCAPLUS
(3) Astrazeneca Uk Ltd; WO 0121598 A 2001 HCAPLUS
(4) Atwell, G; J MED CHEM 1968, V11(2), P300 HCAPLUS
(5) Balcells, M; J AGRIC FOOD CHEM 2000, V48(1), P83 HCAPLUS
(6) Bollinger, F; US 4261730 A 1981 HCAPLUS
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(13) Ito Kunihito; WO 0006550 A 2000 HCAPLUS
(14) Liegeois; J MED CHEM 1993, V36(15), P2107 HCAPLUS
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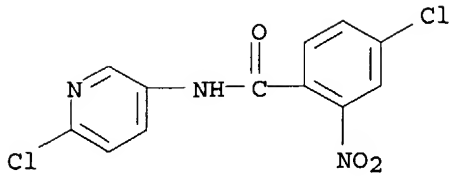
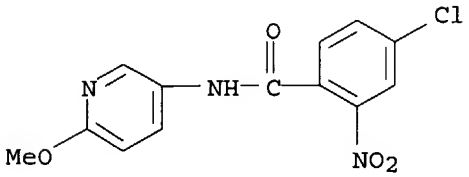
(18) Pfizer; EP 0807633 A 1997 HCAPLUS
(19) Schmidt, G; US 3406168 A 1968 HCAPLUS
(20) Tularik Inc; WO 9936391 A 1999 HCAPLUS
(21) White, G; PESTIC BIOCHEM PHYSIOL 1989, V34(3), P255 HCAPLUS
(22) Yamanouchi Pharm Co Ltd; JP 2000256358 A 2000 HCAPLUS

IT **352228-90-1P 352228-92-3P 352228-97-8P 352229-00-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzamides, nicotinamides, pyrimidinecarboxamides, pyrrolylcarboxamides, and analogs as activators of caspase and inducers of apoptosis and use thereof)

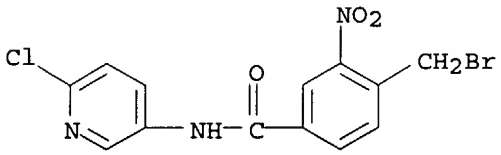
RN 352228-90-1 HCAPLUS
CN Benzamide, 4-chloro-N-(6-chloro-3-pyridinyl)-2-nitro- (9CI) (CA INDEX NAME)



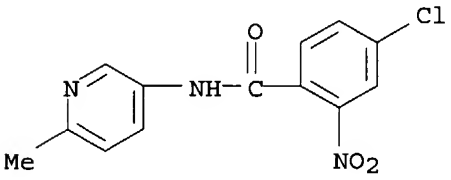
RN 352228-92-3 HCAPLUS
CN Benzamide, 4-chloro-N-(6-methoxy-3-pyridinyl)-2-nitro- (9CI) (CA INDEX NAME)



RN 352228-97-8 HCAPLUS
CN Benzamide, 4-(bromomethyl)-N-(6-chloro-3-pyridinyl)-3-nitro- (9CI) (CA INDEX NAME)

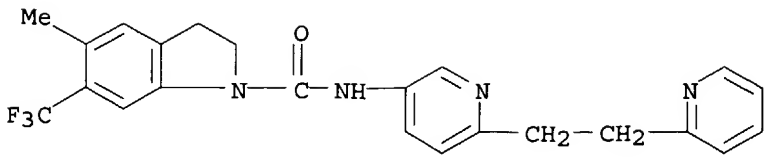


RN 352229-00-6 HCAPLUS
CN Benzamide, 4-chloro-N-(6-methyl-3-pyridinyl)-2-nitro- (9CI) (CA INDEX NAME)



L72 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:565897 HCAPLUS
DN 133:275849
ED Entered STN: 16 Aug 2000
TI 1-[2-[(Heteroarylmethoxy)aryl]carbamoyl]indolines are selective and orally active 5-HT2C receptor inverse agonists
AU Bromidge, S. M.; Davies, S.; Duckworth, D. M.; Forbes, I. T.; Jones, G. E.; Jones, J.; King, F. D.; Blackburn, T. P.; Holland, V.; Kennett, G. A.; Lightowler, S.; Middlemiss, D. N.; Riley, G. J.; Trail, B.; Wood, M. D.
CS Discovery Research, SmithKline Beecham Pharmaceuticals, Harlow, Essex, CM19 5AW, UK
SO Bioorganic & Medicinal Chemistry Letters (**2000**), 10(16), 1867-1870
CODEN: BMCLE8; ISSN: 0960-894X

PB Elsevier Science Ltd.
DT Journal
LA English
CC 1-3 (Pharmacology)
Section cross-reference(s): 27
AB Bisarylmethoxyethers have been identified with nanomolar 5-HT2C affinity and selectivity over both 5-HT2A and 5-HT2B receptors. Several compds. have potent oral activity in a centrally mediated pharmacodynamic model of 5-HT2C function and their therapeutic potential is currently under further investigation. Structure-activity relations are discussed.
ST aryl carbamoylindoline HT2C receptor inverse agonist
IT 5-HT antagonists
(5-HT2C; [2-[(Heteroarylmethoxy)aryl]carbamoyl]indolines are selective and orally active 5-HT2C receptor inverse agonists)
IT 5-HT receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(5-HT2C; [2-[(Heteroarylmethoxy)aryl]carbamoyl]indolines are selective and orally active 5-HT2C receptor inverse agonists)
IT Structure-activity relationship
(serotoninergic antagonist; [2-[(Heteroarylmethoxy)aryl]carbamoyl]indolines are selective and orally active 5-HT2C receptor inverse agonists)
IT 200711-10-0P, SB 247853 200711-11-1P 200711-12-2P 200711-13-3P 200711-14-4P 216019-22-6P 216019-27-1P 300555-17-3P 300555-18-4P 300555-19-5P 300555-20-8P 300555-21-9P 300555-22-0P 300555-23-1P 300555-24-2P 300555-25-3P **300555-26-4P** 300555-27-5P 300555-28-6P 300555-29-7P 300555-30-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
([2-[(Heteroarylmethoxy)aryl]carbamoyl]indolines are selective and orally active 5-HT2C receptor inverse agonists)
IT 103-74-2, 2-(2-Hydroxyethyl)pyridine 142-08-5, 2-Hydroxypyridine 350-46-9, 4-Fluoronitrobenzene 586-98-1, 2-(Hydroxymethyl)pyridine 1121-60-4, 2-Pyridinecarboxaldehyde 5418-51-9, 2-Hydroxy-5-nitropyridine 10177-23-8 21684-59-3, Ethyl 2-methyl-5-pyridinecarboxylate 75680-92-1 200711-22-4, 5-Methyl-6-trifluoromethylindoline
RL: RCT (Reactant); RACT (Reactant or reagent)
([2-[(Heteroarylmethoxy)aryl]carbamoyl]indolines are selective and orally active 5-HT2C receptor inverse agonists)
IT 85003-06-1P 300555-31-1P 300555-32-2P 300555-33-3P 300555-34-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
([2-[(Heteroarylmethoxy)aryl]carbamoyl]indolines are selective and orally active 5-HT2C receptor inverse agonists)
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Bromidge, S; WO 9748700 1997 HCAPLUS
(2) Bromidge, S; Bioorg Med Chem Lett 2000, V10, P1863 HCAPLUS
(3) Bromidge, S; J Med Chem 1998, V41, P1598 HCAPLUS
(4) Bromidge, S; J Med Chem 2000, V43, P1123 HCAPLUS
(5) Kennett, G; Neuropharmacology 1997, V36, P609 HCAPLUS
(6) Sohda, T; Chem Pharm Bull 1982, V30, P3580 HCAPLUS
IT **300555-26-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
([2-[(Heteroarylmethoxy)aryl]carbamoyl]indolines are selective and orally active 5-HT2C receptor inverse agonists)
RN 300555-26-4 HCAPLUS
CN 1H-Indole-1-carboxamide, 2,3-dihydro-5-methyl-N-[6-[2-(2-pyridinyl)ethyl]-3-pyridinyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



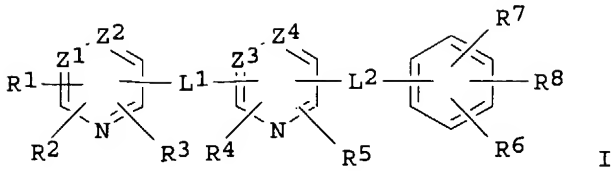
L72 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:553560 HCAPLUS
DN 133:164005
ED Entered STN: 11 Aug 2000
TI Preparation of substituted N-heterocyclyl benzamides and analogs as G-protein coupled heptahelical receptor binding compounds
IN Shiosaki, Kazumi; Fleming, Paul
PA Millennium Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07D213-75
ICS C07D213-65; C07D405-14; C07D409-14; C07D213-81; C07D213-82; C07C233-75; A61K031-4427; A61K031-16; A61P025-00; A61P029-00
CC 27-16 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 1
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000046203	A2	20000810	WO 2000-US3042	20000203 <--
WO 2000046203	A3	20010301		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1150955	A2	20011107	EP 2000-907184	20000203 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRAI US 1999-118893P	P	19990204 <--		
WO 2000-US3042	W	20000203 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2000046203	ICM	C07D213-75
	ICS	C07D213-65; C07D405-14; C07D409-14; C07D213-81; C07D213-82; C07C233-75; A61K031-4427; A61K031-16; A61P025-00; A61P029-00

OS MARPAT 133:164005
GI



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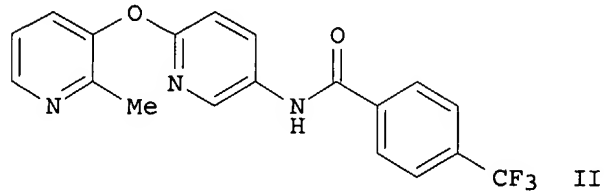

II

AB The title compds. (I) [wherein Z1-Z4 = independently N or C; R1-R8 = independently H, alkyl(amino), alkenyl, alkynyl, alkoxy, thioalkyl, hydroxyalkyl, halo(alkyl), NH2, or carboxyl; L1 = O, S, NH, NR7, (CHR7)n, C(O), CR7OH, or O(CHR7)n; n = 1-3; L2 = a bond, CH2C(O), NHC(O), OC(O), C(O), CH2NHC(O), NHC(O)CH2, CHOH, (CH2)n, O, NH, O(CH2)m, NH(CH2)m, CH2CHOH, and NR8C(O); m = 0-3] were prepared for the treatment of neurol., immunol., inflammatory, cancer, and other β-chemokine mediated disorders. For example, coupling of 2-methyl-3-hydroxypyridine with 2-chloro-5-nitropyridine in the presence of NaH (87%), followed by reduction of the nitro group using Fe/AcOH (51%) and acylation of the amine with 4-trifluoromethylbenzoyl chloride, gave II. In a time resolved fluorescence (TRF) assay, II showed very high binding affinity for the CCR10 receptor with IC50 of < 5 μM.

ST pyridyl benzamide prepn chemokine receptor antagonists; heterocyclyl benzamide prepn G protein coupled receptor binding compd; neurol disorder treatment pyridyl benzamide prepn; immunol disorder treatment pyridyl benzamide prepn; antiinflammatory pyridyl benzamide prepn; anticancer agent pyridyl benzamide prepn

IT Chemokines
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(C-C, receptors, CCR3; preparation of substituted N-heterocyclyl benzamide G-protein coupled heptahelical receptor binding compds. for the treatment of neurol., immunol., inflammatory, cancer, and other β-chemokine mediated disorders)

IT Chemokines
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(C-C, β, receptor CCR2; preparation of substituted N-heterocyclyl benzamide G-protein coupled heptahelical receptor binding compds. for the treatment of neurol., immunol., inflammatory, cancer, and other β-chemokine mediated disorders)

IT Chemokines
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(C-C, β, receptor CCR6; preparation of substituted N-heterocyclyl benzamide G-protein coupled heptahelical receptor binding compds. for the treatment of neurol., immunol., inflammatory, cancer, and other β-chemokine mediated disorders)

IT Chemokines
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(C-C, β, receptor CCR8; preparation of substituted N-heterocyclyl benzamide G-protein coupled heptahelical receptor binding compds. for

the treatment of neurol., immunol., inflammatory, cancer, and other β-chemokine mediated disorders)

IT Chemokines
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(C-C; preparation of substituted N-heterocyclyl benzamide G-protein coupled heptahelical receptor binding compds. for the treatment of neurol., immunol., inflammatory, cancer, and other β-chemokine mediated disorders)

IT Nervous system
(disease, treatment; preparation of substituted N-heterocyclyl benzamide G-protein coupled heptahelical receptor binding compds. for the treatment of neurol., immunol., inflammatory, cancer, and other β-chemokine mediated disorders)

IT Immunity
(disorder, treatment; preparation of substituted N-heterocyclyl benzamide G-protein coupled heptahelical receptor binding compds. for the treatment of neurol., immunol., inflammatory, cancer, and other β-chemokine mediated disorders)

IT Cell migration
(inhibitor; preparation of substituted N-heterocyclyl benzamide G-protein coupled heptahelical receptor binding compds. for the treatment of neurol., immunol., inflammatory, cancer, and other β-chemokine mediated disorders)

IT Signal transduction, biological
(intercellular communication; preparation of substituted N-heterocyclyl benzamide G-protein coupled heptahelical receptor binding compds. for the treatment of neurol., immunol., inflammatory, cancer, and other β-chemokine mediated disorders)

IT Anti-AIDS agents
Anti-inflammatory agents
Antiasthmatics
Antitumor agents
Chemotaxis
Proliferation inhibition
(preparation of substituted N-heterocyclyl benzamide G-protein coupled heptahelical receptor binding compds. for the treatment of neurol., immunol., inflammatory, cancer, and other β-chemokine mediated disorders)

IT Multiple sclerosis
(therapeutic agents; preparation of substituted N-heterocyclyl benzamide G-protein coupled heptahelical receptor binding compds. for the treatment of neurol., immunol., inflammatory, cancer, and other β-chemokine mediated disorders)

IT Lupus erythematosus
(treatment; preparation of substituted N-heterocyclyl benzamide G-protein coupled heptahelical receptor binding compds. for the treatment of neurol., immunol., inflammatory, cancer, and other β-chemokine mediated disorders)

IT Chemokine receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(β chemokine receptor CCR2; preparation of substituted N-heterocyclyl benzamide G-protein coupled heptahelical receptor binding compds. for the treatment of neurol., immunol., inflammatory, cancer, and other β-chemokine mediated disorders)

IT Chemokine receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(β chemokine receptor CCR3; preparation of substituted N-heterocyclyl benzamide G-protein coupled heptahelical receptor binding compds. for the treatment of neurol., immunol., inflammatory, cancer, and other β-chemokine mediated disorders)

IT Chemokine receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(β chemokine receptor CCR4; preparation of substituted N-heterocyclyl benzamide G-protein coupled heptahelical receptor binding compds. for the treatment of neurol., immunol., inflammatory, cancer, and other β-chemokine mediated disorders)

IT Chemokine receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(β chemokine receptor CCR5; preparation of substituted N-heterocyclyl benzamide G-protein coupled heptahelical receptor binding compds. for the treatment of neurol., immunol., inflammatory, cancer, and other β-chemokine mediated disorders)

IT Chemokine receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(β chemokine receptor CCR6; preparation of substituted N-heterocyclyl benzamide G-protein coupled heptahelical receptor binding compds. for the treatment of neurol., immunol., inflammatory, cancer, and other β-chemokine mediated disorders)

IT Chemokine receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(β chemokine receptor CCR8; preparation of substituted N-heterocyclyl benzamide G-protein coupled heptahelical receptor binding compds. for the treatment of neurol., immunol., inflammatory, cancer, and other β-chemokine mediated disorders)

IT Chemokines
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(β, receptor CCR5; preparation of substituted N-heterocyclyl benzamide G-protein coupled heptahelical receptor binding compds. for the treatment of neurol., immunol., inflammatory, cancer, and other β-chemokine mediated disorders)

IT Cytokine receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(β-chemokine, CCR10; preparation of substituted N-heterocyclyl benzamide G-protein coupled heptahelical receptor binding compds. for the treatment of neurol., immunol., inflammatory, cancer, and other β-chemokine mediated disorders)

IT Cytokine receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(β-chemokine, CCR7; preparation of substituted N-heterocyclyl benzamide G-protein coupled heptahelical receptor binding compds. for the treatment of neurol., immunol., inflammatory, cancer, and other β-chemokine mediated disorders)

IT 83690-85-1P 99073-54-8P 125125-11-3P **125125-17-9P**
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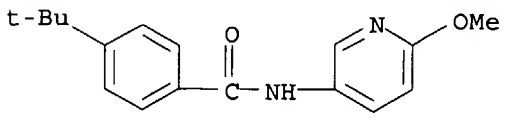
287943-80-0P 287943-81-1P 287943-82-2P 287943-83-3P 287943-84-4P
287943-85-5P **287943-86-6P** 287943-87-7P **287943-88-8P**
287943-89-9P **287943-90-2P** **287943-91-3P**
287943-92-4P 287943-93-5P 287943-94-6P 287943-95-7P
287943-96-8P 287943-97-9P 287943-98-0P 287943-99-1P 287944-00-7P
287944-01-8P 287944-02-9P 287944-03-0P 287944-04-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(GPCR binding compound; preparation of substituted N-heterocyclyl benzamide β-chemokine antagonists and analogs by coupling hydroxyheterocycles with 2-chloro-5-nitroheterocycles, reduction to the amines, and acylation with benzoyl chlorides)

IT 26456-59-7P, 5-Pyrimidinol 31458-33-0P 181633-42-1P 200940-26-7P
287944-12-1P 287944-14-3P 287944-18-7P 287944-20-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of substituted N-heterocyclyl benzamide β-chemokine antagonists and analogs by coupling hydroxyheterocycles with 2-chloro-5-nitroheterocycles, reduction to the amines, and acylation with benzoyl chlorides)

IT 100-55-0, 3-Pyridinemethanol 329-15-7, 4-Trifluoromethylbenzoyl chloride 586-75-4, 4-Bromobenzoyl chloride 1121-25-1, 2-Methyl-3-hydroxypyridine 1710-98-1, 4-tert-Butylbenzoyl chloride 4548-45-2, 2-Chloro-5-nitropyridine 4595-59-9, 5-Bromopyrimidine 24026-56-0, 4-(Perfluoroisopropyl)benzoyl chloride 36823-88-8, 4-Trifluoromethoxybenzoyl chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; preparation of substituted N-heterocyclyl benzamide β-chemokine antagonists and analogs by coupling hydroxyheterocycles with 2-chloro-5-nitroheterocycles, reduction to the amines, and acylation with benzoyl chlorides)

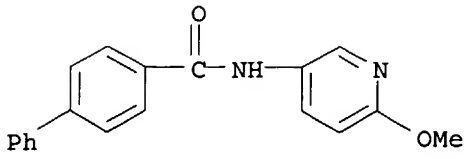
IT **125125-17-9P** **287943-86-6P** **287943-88-8P**
287943-90-2P **287943-91-3P** **287943-92-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(GPCR binding compound; preparation of substituted N-heterocyclyl benzamide β-chemokine antagonists and analogs by coupling hydroxyheterocycles with 2-chloro-5-nitroheterocycles, reduction to the amines, and acylation with benzoyl chlorides)

RN 125125-17-9 HCAPLUS
CN Benzamide, 4-(1,1-dimethylethyl)-N-(6-methoxy-3-pyridinyl)- (9CI) (CA INDEX NAME)

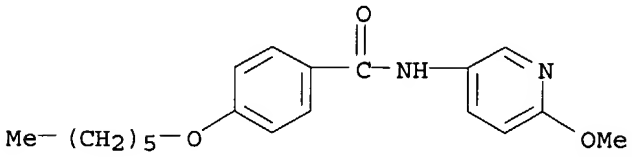


RN 287943-86-6 HCAPLUS

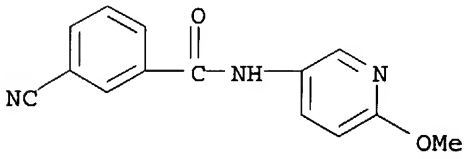
CN [1,1'-Biphenyl]-4-carboxamide, N-(6-methoxy-3-pyridinyl)- (9CI) (CA INDEX NAME)



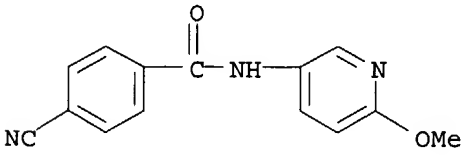
RN 287943-88-8 HCAPLUS
CN Benzamide, 4-(hexyloxy)-N-(6-methoxy-3-pyridinyl)- (9CI) (CA INDEX NAME)



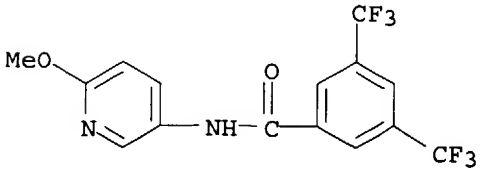
RN 287943-90-2 HCAPLUS
CN Benzamide, 3-cyano-N-(6-methoxy-3-pyridinyl)- (9CI) (CA INDEX NAME)



RN 287943-91-3 HCAPLUS
CN Benzamide, 4-cyano-N-(6-methoxy-3-pyridinyl)- (9CI) (CA INDEX NAME)



RN 287943-92-4 HCAPLUS
CN Benzamide, N-(6-methoxy-3-pyridinyl)-3,5-bis(trifluoromethyl)- (9CI) (CA INDEX NAME)



L72 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:991059 HCAPLUS

DN 124:175845
ED Entered STN: 20 Dec 1995
TI Preparation of substituted tetrahydropyridines and hydroxypiperidines as central nervous system agents
IN Glase, Shelly; Jaen, Juan C.; Smith, Sarah J.; Wise, Lawrence D.
PA Warner-Lambert Co., USA
SO U.S., 20 pp. Cont.-in-part of U.S. 5,273,977.
CODEN: USXXAM
DT Patent
LA English
IC ICM C07D211-74
ICS C07D211-22; A61K031-44; A61K031-445
NCL 514318000
CC 27-16 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 1
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5466698	A	19951114	US 1993-128923	19930929 <--
	US 5273977	A	19931228	US 1991-778248	19911024 <--
	AT 135690	E	19960415	AT 1992-901652	19911029 <--
	ES 2084339	T3	19960501	ES 1992-901652	19911029 <--
	US 5620988	A	19970415	US 1995-469127	19950606 <--
PRAI	US 1990-609274	B2	19901105 <--		
	US 1991-778248	A2	19911024 <--		
	US 1993-128923	A3	19930929 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 5466698	ICM	C07D211-74
	ICS	C07D211-22; A61K031-44; A61K031-445
	NCL	514318000

OS MARPAT 124:175845
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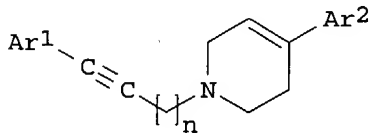

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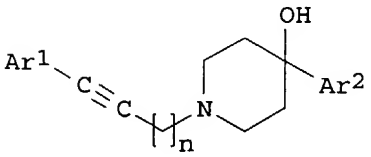


II

AB Title compds. I [Ar1 = (substituted) 2-, 3- or 4-pyridinyl, 3-quinolinyl, Ph, etc.; Ar2 = (substituted) Ph, 2-thienyl, etc.; n = 2-4] and II were prepared Reaction of 3-bromoquinoline with 3-butyn-1-ol in the presence of PdCl2(PPh3)2, CuI, Et3N in CH2Cl2 followed by treatment of 4-(3-quinolinyl)-3-butyn-1-ol with (i-Pr)2NEt, MeSO2Cl and a catalytic amount of DMAP and then reaction of crude intermediate with 4-phenyl-1,2,3,6-tetrahydropyridine in DMF afforded I (Ar1 = 3-quinolinyl; Ar2 = Ph; n = 2) which showed IC50 of 41 nM against [3H]spiroperidol binding. It also showed 28% reversal of brain dopamine synthesis in rats at 10 mg/kg i.p.

ST pyridine tetrahydro CNS agent prepn; tetrahydropyridine central nervous system agent prepn; hydroxypiperidine central nervous system agent prepn; dopaminergic tetrahydropyridine hydroxypiperidine prepn; antipsychotic tetrahydropyridine hydroxypiperidine prepn; antihypertensive tetrahydropyridine hydroxypiperidine prepn; antidepressant tetrahydropyridine hydroxypiperidine prepn; schizophrenia treatment tetrahydropyridine hydroxypiperidine prepn

IT Antidepressants
Antihypertensives
Nervous system agents
Schizophrenia
(preparation of substituted tetrahydropyridines and hydroxypiperidines as central nervous system agents)

IT Tranquilizers and Neuroleptics
(antipsychotics, preparation of substituted tetrahydropyridines and hydroxypiperidines as central nervous system agents)

IT Mental disorder
(depression, preparation of substituted tetrahydropyridines and hydroxypiperidines as central nervous system agents)

IT Neurotransmitter agonists
(dopaminergic, preparation of substituted tetrahydropyridines and hydroxypiperidines as central nervous system agents)

IT 142667-46-7P 142667-47-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of substituted tetrahydropyridines and hydroxypiperidines as central nervous system agents)

IT 142667-36-5P 142667-37-6P 142667-38-7P 142667-39-8P 142667-41-2P
142667-45-6P 142667-48-9P 142667-49-0P **142667-50-3P**
142667-51-4P 142667-52-5P 142667-53-6P 142667-54-7P 142667-55-8P
142667-56-9P 142667-57-0P 142667-58-1P 142913-54-0P 142913-56-2P
173840-27-2P 173840-28-3P 173840-29-4P 173840-30-7P 173840-31-8P
173840-32-9P 173840-33-0P 173840-34-1P 173840-35-2P 173840-36-3P
173840-37-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of substituted tetrahydropyridines and hydroxypiperidines as central nervous system agents)

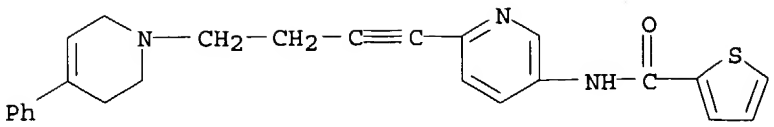
IT 109-04-6, 2-Bromopyridine 123-38-6, Propionaldehyde, reactions
927-74-2, 3-Butyn-1-ol 4487-59-6, 2-Bromo-5-nitropyridine 5271-67-0, 2-Thiophenecarbonyl chloride 5332-24-1, 3-Bromoquinoline 10075-50-0, 5-Bromoindole 10338-69-9, 4-Phenyl-1,2,3,6-tetrahydropyridine 23418-85-1, 3-Butynyl tosylate
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of substituted tetrahydropyridines and hydroxypiperidines as central nervous system agents)

IT 137417-35-7P 142667-63-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of substituted tetrahydropyridines and hydroxypiperidines as central nervous system agents)

IT **142667-50-3P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of substituted tetrahydropyridines and hydroxypiperidines as central nervous system agents)

RN 142667-50-3 HCAPLUS

CN 2-Thiophenecarboxamide, N-[6-[4-(3,6-dihydro-4-phenyl-1(2H)-pyridinyl)-1-butynyl]-3-pyridinyl]- (9CI) (CA INDEX NAME)



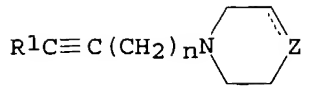
L72 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1992:531077 HCAPLUS
DN 117:131077
ED Entered STN: 04 Oct 1992
TI Preparation of N-(4-aryl-3-butynyl)-4-aryl-1,2,3,6-tetrahydropyridines and analogs as dopaminergics
IN Glase, Shelly; Jaen, Juan Carlos; Smith, Sarah Jane; Wise, Lawrence David
PA Warner-Lambert Co., USA
SO PCT Int. Appl., 101 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07D211-70
ICS C07D211-52; C07D401-06; C07D409-14; A61K031-445
CC 27-16 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 1
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9207831	A1	19920514	WO 1991-US8017	19911029 <--
	W: AU, CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	US 5273977	A	19931228	US 1991-778248	19911024 <--
	AU 9191231	A1	19920526	AU 1991-91231	19911029 <--
	AU 670532	B2	19960725		
	EP 556332	A1	19930825	EP 1992-901652	19911029 <--
	EP 556332	B1	19960320		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 06501952	T2	19940303	JP 1992-502236	19911029 <--
	JP 3047470	B2	20000529		
	AT 135690	E	19960415	AT 1992-901652	19911029 <--
	ES 2084339	T3	19960501	ES 1992-901652	19911029 <--
	JP 3047470	B2	20000529	JP 1991-502236	19911029 <--
	CA 2094702	C	20020212	CA 1991-2094702	19911029 <--
PRAI	US 1990-609274	A	19901105 <--		
	US 1991-778248	A	19911024 <--		
	WO 1991-US8017	A	19911029 <--		

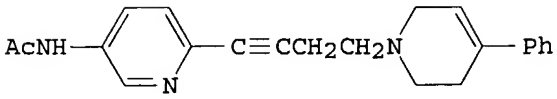
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9207831	ICM	C07D211-70
	ICS	C07D211-52; C07D401-06; C07D409-14; A61K031-445

OS MARPAT 117:131077
GI



I



II

AB Title compds. [I; Z = CR2, CR2OH; R1, R2 = (substituted)(hetero)aryl; n = 2-4] were prepared Thus, 4-phenyl-1,2,3,6-tetrahydropyridine was condensed with HC.tplbond.CCH2CH2SO2C6H4Me-4 and the product condensed with 2-bromo-5-nitropyridine to give, after reduction and acetylation, title compound II which had ED50 of 0.07 mg/kg i.p. for inhibition of locomotor activity in mice.

ST arylpyridine arylbutynyltetrahydro prepn dopaminergic

IT Amenorrhea
Menstruation disorder
Parkinsonism
Schizophrenia
(treatment of, N-(arylbutynyl)tetrahydropyridines and analogs for)

IT Antidepressants
Antihypertensives
Neurotransmitter agonists
(N-(arylbutynyl)tetrahydropyridines and analogs)

IT Tranquilizers and Neuroleptics
(antipsychotics, N-(arylbutynyl)tetrahydropyridines and analogs)

IT Nervous system
(disease, Huntington's chorea, treatment of, N-(arylbutynyl)tetrahydropyridines and analogs for)

IT Sexual behavior
(disorder, treatment of, N-(arylbutynyl)tetrahydropyridines and analogs for)

IT Lactation
(disorder, galactorrhea, treatment of, N-(arylbutynyl)tetrahydropyridines and analogs for)

IT 137417-35-7P 142667-63-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparation of dopaminergic agents)

IT 142667-36-5P 142667-37-6P 142667-38-7P 142667-39-8P 142667-40-1P
142667-41-2P 142667-42-3P 142667-43-4P 142667-44-5P 142667-45-6P
142667-46-7P 142667-47-8P 142667-48-9P 142667-49-0P
142667-50-3P 142667-51-4P 142667-52-5P 142667-53-6P
142667-54-7P 142667-55-8P 142667-56-9P 142667-57-0P 142667-58-1P
142667-59-2P 142667-60-5P 142667-61-6P 142667-62-7P 142913-54-0P
142913-55-1P 142913-56-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as dopaminergic agent)

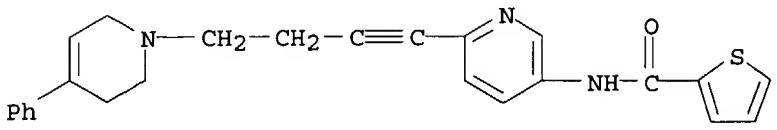
IT 927-74-2, 3-Butyn-1-ol 4487-59-6, 2-Bromo-5-nitropyridine 5271-67-0, 2-Thiophene carbonyl chloride 5332-24-1, 3-Bromoquinoline 10338-69-9, 4-Phenyl-1,2,3,6-tetrahydropyridine 23418-85-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of dopaminergic agents)

IT **142667-50-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as dopaminergic agent)

RN 142667-50-3 HCAPLUS

CN 2-Thiophenecarboxamide, N-[6-[4-(3,6-dihydro-4-phenyl-1(2H)-pyridinyl)-1-

butynyl]-3-pyridinyl]- (9CI) (CA INDEX NAME)



L72 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1990:76956 HCAPLUS
DN 112:76956
ED Entered STN: 03 Mar 1990
TI Preparation of tertiary-butylphenylcarbamoylpyridines as cardiovascular agents
IN Von der Saal, Wolfgang; Mertens, Alfred; Zilch, Harald; Boehm, Erwin; Martin, Ulrich
PA Boehringer Mannheim G.m.b.H., Fed. Rep. Ger.
SO Ger. Offen., 13 pp.
CODEN: GWXXBX
DT Patent
LA German
IC ICM C07D213-75
ICS C07D213-81; C07D401-04; A61K031-165; A61K031-44
ICA C07D401-04
ICI C07D213-75, C07D215-20, C07D217-24, C07D209-32, C07D233-16, C07D249-02, C07D295-12
CC 27-16 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 1
FAN.CNT 1

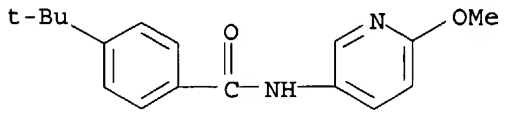
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 3804346	A1	19890824	DE 1988-3804346	19880212 <--
PRAI DE 1988-3804346		19880212 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
DE 3804346	ICM	C07D213-75
	ICS	C07D213-81; C07D401-04; A61K031-165; A61K031-44
	ICA	C07D401-04
	ICI	C07D213-75, C07D215-20, C07D217-24, C07D209-32, C07D233-16, C07D249-02, C07D295-12

OS CASREACT 112:76956; MARPAT 112:76956
GI For diagram(s), see printed CA Issue.
AB The title compds. [I; R1 = H, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, halo, OH, alkoxy, alkenyloxy, alkynyloxy, cycloalkoxy, cycloalkenyloxy, alkylthio, imidazolyl, triazolyl, morpholinyl, thiomorphilinyl, (substituted) pyridinyloxy, pyridinylthio, quinolinyloxy, naphthyloxy, indolyloxy, oxindolyloxy, etc.; A-B = CONH, NHCO]; useful as cardiovascular agents (no data), were prepared Thus, 4-Me3CC6H4COCl in CH2Cl2 was added to 5-amino-2-(1-cyanophenyloxy)pyridine and Et3N in CH2Cl2 with ice cooling. The mixture was stirred 10 min at room temperature to give 23% 4-tert-butyl-N-[6(4-cyanophenyloxy)-3-pyridinyl)benzamide.
ST butylphenylcarbamoylpyridine prepn cardiovascular agent; pyridine butylphenylcarbamoyl prepn cardiovascular agent
IT Erythrocyte
(aggregation of, inhibitors of, butylphenylcarbamoylpyridines as)
IT Antihypertensives
Cardiotonics
(butylphenylcarbamoylpyridines)
IT Blood platelet

(function modifiers, butylphenylcarbamoylpyridines)
IT 1710-98-1, p-tert-Butylbenzoyl chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation by, of amino(cyanophenyloxy)pyridine, in preparation of cardiovascular agent)
IT 66608-11-5, 2-Chloropyridine-5-carbonyl chloride hydrochloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation by, of butylaniline, in preparation of cardiovascular agent)
IT 125125-29-3, 5-Amino-2-(4-cyanophenyloxy)pyridine
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation of, by benzoyl chloride derivative, in preparation of cardiovascular agent)
IT 769-92-6, 4-tert-Butylaniline
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation of, by chloropyridinecarbonyl chloride, in preparation of cardiovascular agent)
IT 109-00-2, 3-Hydroxypyridine
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with chlorophenylpyridinecarboxamide, in preparation of cardiovascular agent)
IT 92571-51-2P 125125-04-4P 125125-05-5P 125125-06-6P 125125-07-7P
125125-08-8P 125125-09-9P 125125-10-2P 125125-11-3P 125125-12-4P
125125-13-5P 125125-14-6P 125125-15-7P 125125-16-8P
125125-17-9P 125125-18-0P 125125-19-1P 125125-20-4P
125125-21-5P 125125-22-6P 125125-23-7P 125125-24-8P 125125-25-9P
125125-26-0P 125125-27-1P 125125-28-2P 125177-20-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as cardiovascular agent)
IT **125125-17-9P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as cardiovascular agent)
RN 125125-17-9 HCAPLUS
CN Benzamide, 4-(1,1-dimethylethyl)-N-(6-methoxy-3-pyridinyl)- (9CI) (CA INDEX NAME)



L72 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1972:400341 HCAPLUS
DN 77:341
ED Entered STN: 12 May 1984
TI Antiulcer agents. p-Aminobenzamido aromatic compounds
AU Moffett, Robert B.; Rober, Andre; Skaletzky, Louis L.
CS Res. Lab., Upjohn Co., Kalamazoo, MI, USA
SO Journal of Medicinal Chemistry (**1971**), 14(10), 963-8
CODEN: JMCMAR; ISSN: 0022-2623
DT Journal
LA English
CC 1-5 (Pharmacodynamics)
AB A series of 2-(p-aminobenzamido)pyridines (I), including 2-(p-aminobenzamido)-3-methylpyridine [17710-06-4] (I, R = 3-Me), had a significant inhibitory effect on exptl. gastric ulcers in rats and showed

some central depressant activity. The I were prepared from p-nitrobenzoyl chloride [122-04-3] and the requisite aromatic amines, followed by reduction of the resulting nitro compds. Attachment of the p-aminobenzamido group at other positions on the pyridine ring or substitution of other N-containing heterocycles for pyridine, greatly decreased the activity. Surprisingly, substitution of a benzene ring in place of the pyridine ring gave a highly active but toxic p-aminobenzanilide [782-45-6].

ST amidobenzamidopyridines antiulceric; benzamidopyridines gastric ulcer

IT Nervous system
(depressants of central, (aminobenzamido)pyridines as)

IT Ulcer
(inhibitors of, (aminobenzamido)pyridines as)

IT Molecular structure-biological activity relationship
(ulcer inhibiting, of (aminobenzamido)pyridines)

IT 122-04-3
RL: BIOL (Biological study)
((aminobenzamido)pyridines synthesis from)

IT 782-45-6 888-78-8 4424-17-3 5221-44-3 6229-22-7 7467-42-7
7498-40-0 13160-58-2 13160-59-3 13160-61-7 13313-18-3 14315-16-3
14547-74-1 17710-04-2 17710-05-3 17710-06-4 17710-07-5
17710-08-6 17772-07-5 23612-46-6 33120-25-1 35353-21-0
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36845-02-0 36845-03-1 36845-05-3 36845-08-6 36845-09-7
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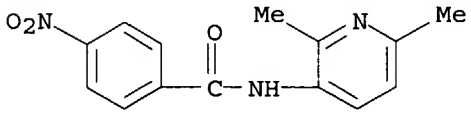
36855-78-4 36855-80-8 36855-81-9 36876-09-2 36918-74-8
36918-75-9 36918-77-1 36918-78-2 36918-79-3 36918-80-6
36987-32-3 36987-33-4 37586-00-8
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(antiulcer and nervous system activity of)

IT 36855-85-3P 36855-86-4P 36855-87-5P 36855-88-6P 36855-89-7P
36855-90-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

IT **36855-59-1**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(antiulcer and nervous system activity of)

RN 36855-59-1 HCAPLUS

CN Benzamide, N-(2,6-dimethyl-3-pyridinyl)-4-nitro- (9CI) (CA INDEX NAME)



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L65 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:886851 HCAPLUS

DN 136:20023

ED Entered STN: 07 Dec 2001

TI Preparation of pyridine-substituted benzanilides as **potassium channel** openers

IN **McNaughton-Smith, Grant**; Fritch, Paul Christopher; Amato, George Salvatore
PA USA
SO U.S. Pat. Appl. Publ., 37 pp., Cont.-in-part of U.S. Ser. No. 632,576.
CODEN: USXXCO
DT Patent
LA English
IC C07D041-02
ICS C07D213-82
NCL 546268100
CC 27-16 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): **1**

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 2001049444	A1	20011206	US 2001-776791	20010202	<--
	US 6495550	B2	20021217			
	US 6326385	B1	20011204	US 2000-631747	20000804	<--
	US 6372767	B1	20020416	US 2000-632576	20000804	<--
	US 2002013349	A1	20020131	US 2001-939230	20010824	<--
	US 2002091122	A1	20020711	US 2001-4122	20011101	<--
	US 6737422	B2	20040518			
	US 2002052393	A1	20020502	US 2001-2800	20011102	<--
	US 6605725	B2	20030812			
	WO 2002062295	A2	20020815	WO 2002-US3061	20020201	
	WO 2002062295	A3	20030703			
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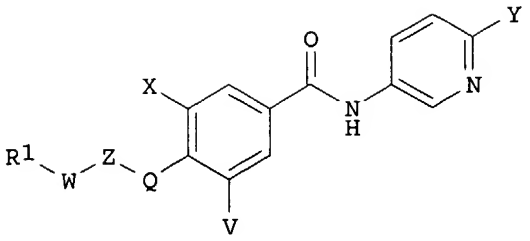
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
	EP 1363884	A2	20031126	EP 2002-704333	20020201	
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR					
PRAI	US 1999-147221P	P	19990804	<--		
	US 2000-632576	A2	20000804	<--		
	US 1999-158712P	P	19991008	<--		
	US 1999-165847P	P	19991116	<--		
	US 2000-631747	A	20000804	<--		
	US 2001-776791	A	20010202			
	WO 2002-US3061	W	20020201			

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
US 2001049444	IC	C07D041-02	
	ICS	C07D213-82	
	NCL	546268100	
US 2001049444	ECLA	C07D213/75B4; C07D213/75B8; C07D401/12; C07D405/12; C07D405/12; C07D009/12; C07D417/12	<--
US 2002091122	ECLA	A61K031/00; A61K031/44; C07D213/75B8; C07D213/75B4; C07D401/12; C07D405/12; C07D409/12; C07D417/12	<--
US 2002052393	ECLA	C07D213/75B8; C07D213/75B4; C07D401/12; C07D405/12; C07D405/12; C07D009/12; C07D417/12	<--

OS MARPAT 136:20023
GI



I

AB The title compds. [I; Y = H, Me, OMe, OCF3, halo; V, X = H, halo, alkyl, etc.; R1 = alkyl, heteroalkyl, aryl, etc.; Q, W = C.tplbond.C, (un)substituted CH:CH, alkylene; Z = O, CO, (un)substituted NH, etc.] which are **voltage-dependent potassium channel** openers, and are useful for the treatment of **central** and **peripheral nervous system** disorders, were prepared General procedures for preparing compds. I such as 3,4-dichloro-N-(pyridin-3-yl)benzamide were given. The activity of compds. I, assayed according to a KCNQ2 screening protocol, ranged from about 30% to greater than about 70% efflux.

ST benzanilide pyridine substituted prepn **potassium channel** opener; nervous system agent benzanilide prepn; benzamide pyridyl prepn **potassium channel** opener

IT Aging, animal
(age-related memory loss; preparation of benzanilides as **potassium channel** openers)

IT **Nervous system, disease**
(**ataxia**; preparation of benzanilides as **potassium channel** openers)

IT **Mental disorder**
(bipolar disorder; preparation of benzanilides as **potassium channel** openers)

IT Antitumor agents
(brain; preparation of benzanilides as **potassium channel** openers)

IT Vision
(disorder, vision loss; preparation of benzanilides as **potassium channel** openers)

IT Learning
(disorder; preparation of benzanilides as **potassium channel** openers)

IT **Brain, neoplasm**
(inhibitors; preparation of benzanilides as **potassium channel** openers)

IT Hearing
(loss; preparation of benzanilides as **potassium channel** openers)

IT **Mental disorder**
(mood-affecting; preparation of benzanilides as **potassium channel** openers)

IT **Nerve, disease**
(motor; preparation of benzanilides as **potassium channel** openers)

IT Muscle, disease
(myokymia; preparation of benzanilides as **potassium channel** openers)

IT **Ion channel openers**
(**potassium**; preparation of benzanilides as **potassium channel** openers)

IT **Anti-Alzheimer's agents**

Anticonvulsants
Antimigraine agents
Antiparkinsonian agents
Antipsychotics
Cognition enhancers
Nervous system agents
(preparation of benzanilides as **potassium channel** openers)

IT **Nervous system, disease**
(**spasticity**; preparation of benzanilides as **potassium channel** openers)

IT **Brain, disease**
(**stroke**; preparation of benzanilides as **potassium channel** openers)

IT 304885-01-6P **325457-87-2P 325457-88-3P**
325457-89-4P 325457-90-7P 325457-91-8P
325457-92-9P **325457-93-0P 325457-94-1P**
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378241-12-4P 378241-13-5P 378241-14-6P
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378241-24-8P 378241-25-9P 378241-26-0P
378241-27-1P 378241-28-2P 378241-29-3P
378241-31-7P 378241-32-8P 378241-33-9P
378241-34-0P 378241-35-1P 378241-36-2P
378241-37-3P
RL: **PAC (Pharmacological activity)**; SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzanilides as **potassium channel** openers)

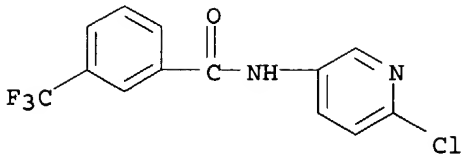
IT 2251-65-2, 3-(Trifluoromethyl)benzoyl chloride 3222-47-7, 6-Methylnicotinic acid 4487-59-6 4548-45-2, 5-Nitro-2-chloropyridine 5350-93-6, 5-Amino-2-chloropyridine 231291-22-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of benzanilides as **potassium channel** openers)

IT 456-24-6P 13534-97-9P, 5-Amino-2-bromopyridine 323578-37-6P 325457-86-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of benzanilides as **potassium channel** openers)

IT **325457-87-2P**
RL: **PAC (Pharmacological activity)**; SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzanilides as **potassium channel** openers)

RN 325457-87-2 HCAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-(trifluoromethyl)- (9CI) (CA INDEX

NAME)



L65 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:114932 HCAPLUS
DN 134:157577
ED Entered STN: 15 Feb 2001
TI Benzanilides as **potassium channel** openers, compositions, and preparation thereof
IN **McNaughton-Smith, Grant Andrew; Gross, Michael Francis ; Wickenden, Alan David**
PA **Icagen, Inc., USA**
SO PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K
CC 1-11 (**Pharmacology**)
Section cross-reference(s): 27, 28, **63**

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001010380	A2	20010215	WO 2000-US21308	20000804 <--
	WO 2001010380	A3	20010816		
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 2000067585	A5	20010305	AU 2000-67585	20000804 <--
	US 6326385	B1	20011204	US 2000-631747	20000804 <--
	EP 1208085	A2	20020529	EP 2000-955367	20000804 <--
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	NZ 516610	A	20040528	NZ 2000-516610	20000804 <--
	US 2002013349	A1	20020131	US 2001-939230	20010824 <--
	ZA 2002000502	A	20030205	ZA 2002-502	20020121 <--
	US 2004157829	A1	20040812	US 2004-770658	20040202 <--
PRAI	US 1999-147221P	P	19990804 <--		
	US 1999-158712P	P	19991008 <--		
	US 1999-165847P	P	19991116 <--		
	US 2000-631747	A	20000804 <--		
	US 2000-632576	A	20000804 <--		
	WO 2000-US21308	W	20000804 <--		
	US 2001-4122	A1	20011101		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2001010380	ICM	A61K

OS MARPAT 134:157577

AB Benzanilides are provided which are **voltage-dependent potassium channel** openers. Compns. and methods of using the benzanilides are also provided. The compds. of the invention are useful for the treatment of **central** and **peripheral nervous system** disorders.

ST benzanilide prepn **potassium channel** opener therapeutic; nervous system agent benzanilide prepn

IT Aging, animal
(age-related memory loss; benzanilides as **potassium channel** openers, compns., and preparation)

IT **Nervous system**
(**ataxia**; benzanilides as **potassium channel** openers, compns., and preparation)

IT **Anti-Alzheimer's agents**
Anticonvulsants
Antimigraine agents
Antiparkinsonian agents
Antipsychotics
Cognition enhancers
Drug delivery systems
Nervous system agents
(benzanilides as **potassium channel** openers, compns., and preparation)

IT Antitumor agents
(brain; benzanilides as **potassium channel** openers, compns., and preparation)

IT Vision
(disorder, vision loss; benzanilides as **potassium channel** openers, compns., and preparation)

IT Learning
(disorder; benzanilides as **potassium channel** openers, compns., and preparation)

IT **Brain, neoplasm**
(inhibitors; benzanilides as **potassium channel** openers, compns., and preparation)

IT Hearing
(loss; benzanilides as **potassium channel** openers, compns., and preparation)

IT **Mental disorder**
(manic bipolar disorder; benzanilides as **potassium channel** openers, compns., and preparation)

IT **Mental disorder**
(mood-affecting; benzanilides as **potassium channel** openers, compns., and preparation)

IT **Nerve, disease**
(motor; benzanilides as **potassium channel** openers, compns., and preparation)

IT Muscle, disease
(myokymia; benzanilides as **potassium channel** openers, compns., and preparation)

IT **Ion channel openers**
(**potassium**; benzanilides as **potassium channel** openers, compns., and preparation)

IT **Nervous system**
(**spasticity**; benzanilides as **potassium channel** openers, compns., and preparation)

IT **Brain, disease**
(**stroke**; benzanilides as **potassium channel** openers, compns., and preparation)

IT 304885-01-6P **325457-87-2P 325457-88-3P**
325457-90-7P 325457-91-8P 325457-92-9P
325457-93-0P 325457-94-1P 325457-95-2P

325457-96-3P 325457-97-4P 325457-98-5P
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325458-05-7P 325458-06-8P 325458-07-9P
325458-08-0P 325458-09-1P 325458-10-4P
325458-11-5P 325458-12-6P **325458-13-7P**
325458-14-8P 325458-15-9P 325458-16-0P
325458-17-1P 325458-18-2P 325458-19-3P
325458-20-6P 325458-21-7P 325458-22-8P
325458-23-9P 325458-24-0P 325458-25-1P
325458-26-2P 325458-27-3P 325458-32-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(benzanilides as **potassium channel** openers, compns., and preparation)

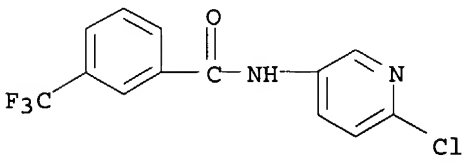
IT 456-24-6P 13534-97-9P, 5-Amino-2-bromopyridine 323578-37-6P
325457-86-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(benzanilides as **potassium channel** openers, compns., and preparation)

IT **325457-89-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(reaction; benzanilides as **potassium channel** openers, compns., and preparation)

IT 2251-65-2, 3-(Trifluoromethyl)benzoyl chloride 3222-47-7,
6-Methylnicotinic acid 4487-59-6 4548-45-2, 5-Nitro-2-chloropyridine
5350-93-6, 5-Amino-2-chloropyridine 231291-22-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction; benzanilides as **potassium channel** openers, compns., and preparation)

IT **325457-87-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(benzanilides as **potassium channel** openers, compns., and preparation)

RN 325457-87-2 HCAPLUS
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)



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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 6 SEP 2004 HIGHEST RN 740796-45-6
DICTIONARY FILE UPDATES: 6 SEP 2004 HIGHEST RN 740796-45-6

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

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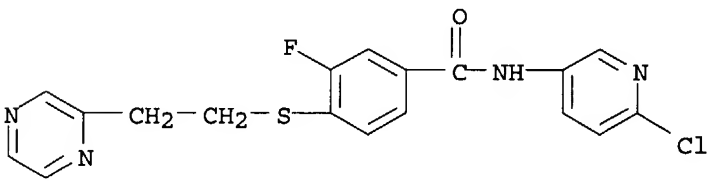
L28 ANSWER 1 OF 73 REGISTRY COPYRIGHT 2004 ACS on STN
RN **378241-37-3** REGISTRY
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(2-pyrazinylethyl)thio]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C18 H14 Cl F N4 O S
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)



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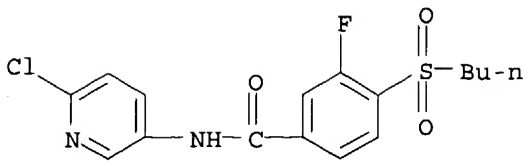
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:20023

L28 ANSWER 5 OF 73 REGISTRY COPYRIGHT 2004 ACS on STN
RN **378241-33-9** REGISTRY
CN Benzamide, 4-(butylsulfonyl)-N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C16 H16 Cl F N2 O3 S
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)



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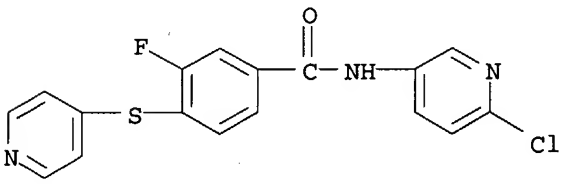
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:20023

L28 ANSWER 10 OF 73 REGISTRY COPYRIGHT 2004 ACS on STN
RN **378241-27-1** REGISTRY
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(4-pyridinylthio)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C17 H11 Cl F N3 O S
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)



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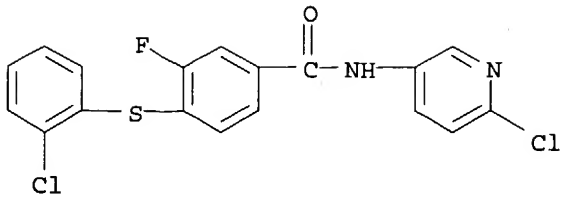
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:20023

L28 ANSWER 15 OF 73 REGISTRY COPYRIGHT 2004 ACS on STN
RN **378241-22-6** REGISTRY
CN Benzamide, 4-[(2-chlorophenyl)thio]-N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C18 H11 Cl2 F N2 O S
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)



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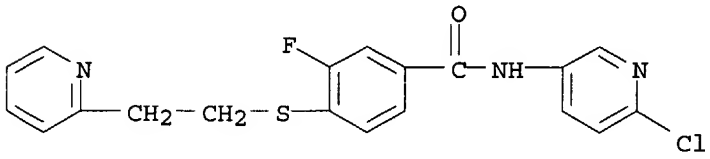
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:20023

L28 ANSWER 20 OF 73 REGISTRY COPYRIGHT 2004 ACS on STN
RN **378241-17-9** REGISTRY
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[[2-(2-pyridinyl)ethyl]thio]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C19 H15 Cl F N3 O S
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

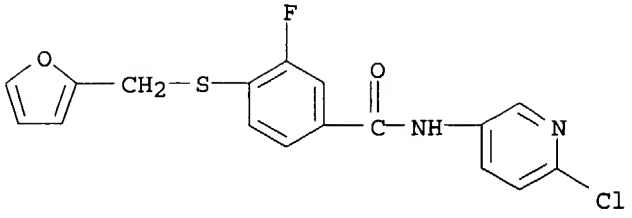


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:20023

L28 ANSWER 25 OF 73 REGISTRY COPYRIGHT 2004 ACS on STN
RN **378241-12-4** REGISTRY
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(2-furanylmethyl)thio]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C17 H12 Cl F N2 O2 S
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

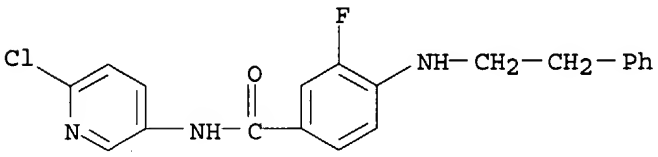


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:20023

L28 ANSWER 30 OF 73 REGISTRY COPYRIGHT 2004 ACS on STN
RN **378241-06-6** REGISTRY
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-[(2-phenylethyl)amino]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C20 H17 Cl F N3 O
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
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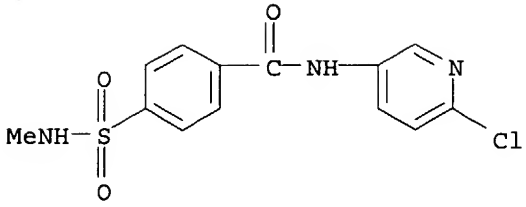
REFERENCE 1: 136:20023

L28 ANSWER 35 OF 73 REGISTRY COPYRIGHT 2004 ACS on STN
RN **325458-24-0** REGISTRY
CN Benzamide, N-(6-chloro-3-pyridinyl)-4-[(methylamino)sulfonyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H12 Cl N3 O3 S
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)



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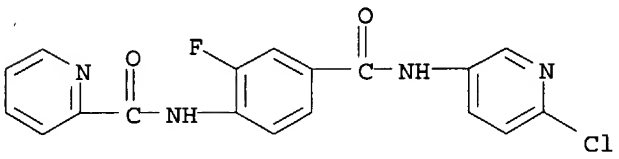
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:20023

REFERENCE 2: 134:157577

L28 ANSWER 40 OF 73 REGISTRY COPYRIGHT 2004 ACS on STN
RN **325458-19-3** REGISTRY
CN 2-Pyridinecarboxamide, N-[4-[[(6-chloro-3-pyridinyl)amino]carbonyl]-2-fluorophenyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C18 H12 Cl F N4 O2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)



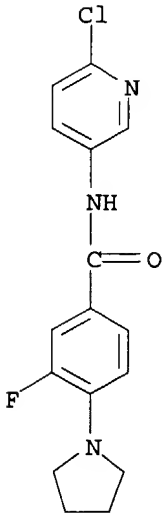
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:20023

REFERENCE 2: 134:157577

L28 ANSWER 45 OF 73 REGISTRY COPYRIGHT 2004 ACS on STN
RN **325458-14-8** REGISTRY
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro-4-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C16 H15 Cl F N3 O
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)



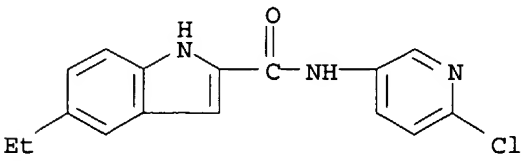
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:20023

REFERENCE 2: 134:157577

L28 ANSWER 50 OF 73 REGISTRY COPYRIGHT 2004 ACS on STN
RN **325458-09-1** REGISTRY
CN 1H-Indole-2-carboxamide, N-(6-chloro-3-pyridinyl)-5-ethyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C16 H14 Cl N3 O
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)



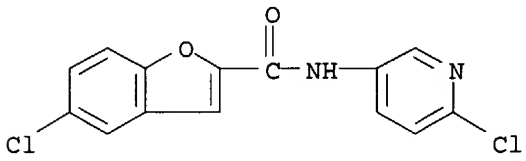
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:20023

REFERENCE 2: 134:157577

L28 ANSWER 55 OF 73 REGISTRY COPYRIGHT 2004 ACS on STN
RN **325458-04-6** REGISTRY
CN 2-Benzofurancarboxamide, 5-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C14 H8 Cl2 N2 O2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)



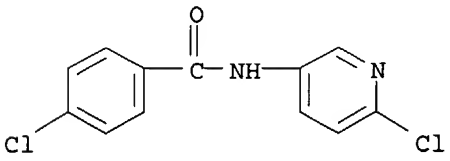
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:20023

REFERENCE 2: 134:157577

L28 ANSWER 60 OF 73 REGISTRY COPYRIGHT 2004 ACS on STN
RN **325457-99-6** REGISTRY
CN Benzamide, 4-chloro-N-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C12 H8 Cl2 N2 O
SR CA
LC STN Files: CA, CAPLUS, CHEMCATS, TOXCENTER, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

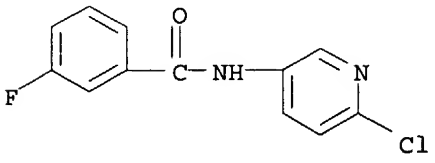
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:20023

REFERENCE 2: 134:157577

L28 ANSWER 65 OF 73 REGISTRY COPYRIGHT 2004 ACS on STN

RN **325457-94-1** REGISTRY
CN Benzamide, N-(6-chloro-3-pyridinyl)-3-fluoro- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C12 H8 Cl F N2 O
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)



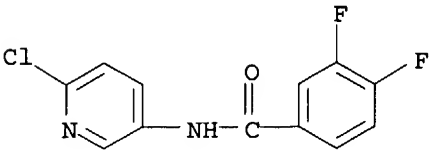
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:20023

REFERENCE 2: 134:157577

L28 ANSWER 70 OF 73 REGISTRY COPYRIGHT 2004 ACS on STN
RN **325457-89-4** REGISTRY
CN Benzamide, N-(6-chloro-3-pyridinyl)-3,4-difluoro- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C12 H7 Cl F2 N2 O
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

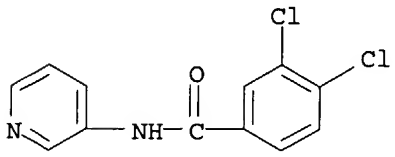
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:20023

REFERENCE 2: 134:157577

L28 ANSWER 73 OF 73 REGISTRY COPYRIGHT 2004 ACS on STN
RN **304885-01-6** REGISTRY
CN Benzamide, 3,4-dichloro-N-3-pyridinyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD

MF C12 H8 Cl2 N2 O
SR Chemical Library
LC STN Files: CA, CAPLUS, CHEMCATS, TOXCENTER, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)



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2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:20023

REFERENCE 2: 134:157577

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